

## **A Peer Coaching Curriculum's Influence on Medical Educator Effectiveness**

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### **ABSTRACT**

Faculty development is imperative for the enrichment of medical education. Nurse anesthesia educators can benefit from faculty development initiatives and various means, such as peer coaching, should be explored. Not only should the design of the faculty development curriculum be scientifically supported, validating its effectiveness is as imperative to achieve academic excellence. The goal of faculty development should be to make deliberate use of learning theories and educational principles when designing and implementing faculty development programs. The purpose of this study is to improve the faculty developmental process of nurse anesthetist faculty educators through a structured peer coaching curriculum. Effectiveness will be measured by the utilization of coaching strategies, goal attainment as well as improvements in confidence, satisfaction, and collegiality.

Nine certified registered nurse anesthetist (CRNA) core faculty educators participated in a formal peer coaching staff development curriculum. Participants were introduced to the coaching concepts and skillsets during a day-long *Power of Coaching* class. Personal and group goals were identified at this time and served as the means in which to apply deliberate coaching practice. CRNA faculty participated in monthly preparatory on-line modules related to the coaching skillsets and engaged in monthly, one-hour, face-to-face coaching sessions. The sessions comprised of a brief review and application a particular skillset. Group coaching using a whipped coaching technique to address the group goal was utilized and the participants engaged in coaching practice on their individual goal through assigned coaching triads. Reflective journals were encouraged to promote reflection and encourage goal progression.

Participants completed pre and post implementation surveys to address impacts related to collegiality, job satisfaction, confidence, and coaching skills. Reflective journal entries were qualitatively analyzed for themes. A post-intervention interview was conducted to gather additional qualitative information.

Certified Registered Nurse Anesthetist (CRNA) faculty educators valued their experience as participants of an organized peer coaching curriculum. Participants gained tools and skills associated with awareness of mindset and relationships, communication and feedback, active listening and powerful questions, accountability, and the coaching process. Both individual and group goals progressed for all individuals. The most impactful experiences included having new “tools” to use personally and professionally, group goal progression, and improved communication and collegiality amongst the group. By using the Job Satisfaction Survey, participants showed improvements in overall job satisfaction. Results indicated improvements in coaching skill after completion of the Coach’s Evaluation Checklist. Quantitative analysis also verified individual and group goal progression. No statistical significance was discovered from quantitative assessments.

Analysis of the data confirms the participants’ utilization of coaching strategies, goal attainment as well as improvements in confidence, satisfaction, and collegiality. As previously stated, faculty development is imperative for the enrichment of medical education. Nurse anesthesia educators can benefit from faculty development initiatives, specifically an organized peer coaching curriculum.

## **INTRODUCTION**

### **Background**

Students of health care professions rely on rigorous instruction to safely care for patients. Medical educators fulfill that obligation in both the classroom and clinical arenas. Those clinicians or scientists possessing content expertise and showing an interest in medical education find themselves in the position to teach the next generation of medical professionals. Historically medical educators rarely possess formalized degrees in education.<sup>3</sup> Without formal educational training, medical educators are often left to rely upon the educational experiences which occurred when they were the learner.<sup>4</sup> Medical educators are also more likely to learn by informal experimentation, utilizing what has worked and disregarding unsuccessful practices.<sup>2</sup> Proliferation of evidence based practice both in medicine and education has made it increasingly difficult for formal medical educators to stay abreast to the latest practice changes.

Faculty development constitutes a process by which medical faculty, including preceptors educating in the clinical setting, work systematically to improve upon the following skills: (1) educational skills, (2) leadership skills, (3) skills necessary to engage in scholarly activities, (4) personal development. Not only are educational development programs imperative for the advancement of educational expertise for medical professionals, a diverse approach for delivery must also be considered.

Medical faculty development programs must be cognizant of the complexity of the healthcare system, acknowledge the diverse levels of educational expertise of the participants, and address the competing demands of the teacher's time. Not only are medical educators often responsible for the delivery of classroom didactic material, they may actively be involved in the

clinical education that takes place within the demanding and intense environment of direct patient care where efficiency and effectiveness are imperative. Superior medical education includes not only components of content expertise and knowledge of the learners, the educator must obtain knowledge of general principles related to teaching and learning.<sup>4</sup> Faculty development initiatives are essential to provide the expansion of educational knowledge and expertise.

### **Certified Registered Nurse Anesthetists**

Anesthesia providers, specifically Certified Registered Nurse Anesthetists or CRNA's, fall within the scope of health care professionals in need of organized faculty development strategies. Certified Registered Nurse Anesthetist educators are not immune to the challenges of obtaining and maintaining educational skills and expertise. Consistent with other medical educators, most CRNA faculty educators are practice experts with a passion for education and lack formal educational degrees.

CRNAs are registered nurses who have a minimum of one year of experience in an intensive care unit and who have obtained either a Masters or Doctorate of Anesthesia Practice degree to gather the necessary knowledge in the field of anesthesia. As advanced practice nurses, CRNAs are expected to plan and execute all phases of anesthesia for surgical and medical procedures. The growing complexity of today's patient population makes it imperative that student nurse anesthetists are given the tools to safely and effectively deliver anesthesia care. Attainment of this skillset is dependent upon the quality of anesthesia education received.

## **Peer Coaching**

A survey of medical school faculty indicated that 43% of first-time assistant professors do not stay in their positions.<sup>5</sup> In a survey of nursing faculty, 44% of respondents admitted dissatisfaction in their faculty roles and 25% expressed interest in leaving their positions to lighten the workload.<sup>6</sup> Lack of mentoring was indicated as a significant factor affecting the success of novice educators.<sup>5</sup>

Mentoring relationships characterized by interactions between an expert and a novice have been noted to improve productivity, job satisfaction, professional fulfillment and advancement, reduction of stress, increases in confidence and self-efficacy, as well as improvements in communication and comradery.<sup>6,7</sup> Mentoring in this context can be described as hierarchical in nature and a vast difference in content expertise is present between the mentor and the mentee in which the mentor offers assistance, guidance, and support.<sup>8</sup> Peer coaching is a form of mentoring in which individuals at the same level of professional development provide regular support and mentoring to one another. This low-cost, self-sufficient means of mentoring has been employed in business leadership development and has been introduced in nursing and medical arenas to augment clinical development.<sup>9</sup>

## **Purpose of This Study**

Faculty development is imperative for the enrichment of medical education. Nurse anesthesia educators can benefit from faculty development initiatives and various means, such as peer coaching, should be explored. Not only should the design of the faculty development curriculum be scientifically supported, validating its effectiveness is as imperative to achieve academic excellence. The goal of faculty development should be to make deliberate use of

learning theories and educational principles when designing and implementing faculty development programs.<sup>2</sup> The purpose of this study is to improve the faculty developmental process of nurse anesthetist faculty educators through a structured peer coaching curriculum. Effectiveness will be measured by the utilization of coaching strategies, goal attainment as well as improvements in confidence, satisfaction, and collegiality.

### **LITERATURE REVIEW**

In this literature review, the impact of faculty development strategies will be explored along with characteristics associated with the successful implementation of such. Published data describing the need for peer coaching programs will also be presented. Guided by text book authors and researchers alike, coaching will be described. Focusing on the ideologies of appreciative coaching, core skillsets of coaching will be explored. Peer coaching's impact on medical education will be described along with features associated with successful implementation and risk factors. Didactic application of peer coaching will be visited. To address a faculty development curriculum's impact on goal setting and collegiality, literature exploration on the topics was performed. Strategies associated with successful goal-setting practices and efforts to build collegiality are identified.

#### **Faculty Development**

Complexity of patient health, stringent resource allocation, and competition in the healthcare marketplace reinforces the need for an efficient, effective, and creative means to disseminate medical education. Relying on informal experimentation is time-consuming and often unyielding of one's full potential. In the 1970's, Gaff<sup>10</sup> intellectualized a formal means in

which higher education faculty be given the resources to improve their instructional skills, enhance their curriculum development, and improve the educational climate for their students. Faculty development programs aim at reintroducing or expanding upon concepts utilized in the educator role. Successful development initiatives facilitate the educator's accomplishment of practice improvement and change management.<sup>11</sup> Programs may focus on developing expertise associated with teaching, administrative, or research duties<sup>12</sup> and may be accomplished through workshops, seminars, literature consultation, short courses, and longitudinal programs. Specific goals often associated with faculty development programs include development of new teaching skills, implementing or planning curricula, student-teacher relationship refinement, as well as student feedback and assessment strategy enhancement.<sup>2</sup>

A systematic review conducted by Steinert, et. al.<sup>2</sup> evaluated the effectiveness of faculty development for medical educators. This review intended to identify whether faculty development programs are associated with improvements in educator effectiveness as well as identification of features most related to effectiveness. Lastly, the researchers looked for evidence that faculty development programs lead to changes in the knowledge, attitudes, and skills of teachers in medical education.

Results indicated that the overall satisfaction with faculty development programs was high with participants reporting that knowledge of educational principles as well as teaching skills, characterized by significant gains when formal tests of knowledge were used. Changes of teaching behavior were detected by students and reported by teachers. Collegiate networks and increases in educational involvement were noted. Key features identified with the most effective faculty development programs were those that used experimental learning, approaches for feedback, effective collegiate relationship development, development of interventions based on



learning theories, and the use of a diverse arrangement of educational methods within single interventions.

The peer coaching curriculum focus of this study constitutes a longitudinal design and special attention was given to Steinert's<sup>2</sup> study of longitudinal programs and fellowships. The research team identified high levels of satisfaction (Level 1: Reaction via Kirkpatrick's model). Participants commented on the value of meetings over time, especially those in which a practical learning component was integrated into the curriculum. Participants in the longitudinal studies also reported positive attitudes towards teaching, professional self-worth, perception of capability and authority as a result of the curriculum (Level 2a: Learning via Kirkpatrick's model). Longitudinal designs lead to the reporting of greater understanding and use of feedback as well as knowledge regarding problem-solving, teaching, and communication (Level 2b: Learning via Kirkpatrick's model). Behavioral changes were noted with longitudinal curriculum designs (Level 3: Behavior via Kirkpatrick's model). Participants reported changes in education roles with many reporting new and expanded educational responsibilities post-intervention, as well as evidence of behavioral changes reflecting the curriculum during observational analysis.

Based on the results of their review, recommendations from the researchers include the deliberate partnering of learning theory and faculty development design. Faculty development should be customized to reflect the individual culture and needs of the teachers and students. In addition, the researchers acknowledged the importance of developing programs that extend over time to allow for cumulative learning, practice, and growth. Curriculum that stimulates the participants to engage in self-reflection was also encouraged as it will be more likely to lead to the continuation of self-directed interventions and progress. Future research recommendations by

the authors identify the need to capture more qualitative data using anecdotal observations and faculty members' stories and to assess change over time.

A systematic review of medical faculty development programs revealed strategies correlated to changing teachers' actions.<sup>13</sup> These include programs in which workshops and student rating of instruction are coupled with consultation and intensive fellowships. These comprehensive education programs should be built upon 1) professional development (novice faculty oriented to their new roles; 2) instructional development (access to teaching improvement workshops, peer coaching, mentoring); 3) leadership development (well-designed curriculum and effective leaders to support scholarship; 4) organizational development (organizational policies that support continual learning).

In 2011, Tessen published the results of a survey given to senior women faculty in higher education institutions to identify current needs and challenges. Surveys were sent to 134 senior women at one university and 70 at another. Response rates were 39.5% and 51% respectively. Over 80% of respondents considered that faculty development programs designed for senior women faculty would provide knowledge and skills. The preferred content involved skills in people management, operational issues and career development, as well as political awareness. The preferred format involved mentoring, coaching, peer networks, 360- feedback, and shadowing as well as mentoring at another university. Several themes emerged which included (1) the impact of excessive workloads and high levels of administration on their effectiveness; (2) the need for peer and supervisor support and networks, (3) underpinning by ineffective organizational skills and administrative support.<sup>14</sup>

**Application of Literature: Faculty Development**

Efforts to provide medical educators with faculty development strategies can benefit medical educators, their students, and the patients eventually cared for. A structured peer coaching program can fulfil these faculty development needs and its services have been sought by educators.<sup>13,14</sup> Faculty development programs, specifically longitudinal designs, have been linked to improvements in teaching, stronger collegiate networks, greater educational involvement, positive attitudes towards teaching, gains in professional self-worth, increases in the perception of capability, greater satisfaction, a positive attitude towards teaching, greater understanding and use of feedback as well as knowledge regarding problem-solving, teaching, and communication, expanding educational responsibilities post-intervention, as well as evidence of behavioral changes reflecting the curriculum.<sup>2</sup>

Key features identified with the most effective faculty development programs were those that used (1) experimental learning; (2) approaches for feedback; (3) effective collegiate relationship development; (4) development of interventions based on learning theories; (5) the use of a diverse arrangement of educational methods within single interventions; (6) a curriculum that extends over time to allow for cumulative learning, practice, and growth; (7) curriculum that stimulates the participants to engage in self-reflection.<sup>2</sup> By utilizing all of the key features of a successful longitudinal faculty development program as described by Steinert,<sup>2</sup> the consequential benefits of such are anticipated through this structured peer coaching faculty development program. Per Steinert's suggestions, this study will also involve qualitative data through anecdotal observations and faculty members' stories to assess change over time.<sup>2</sup>

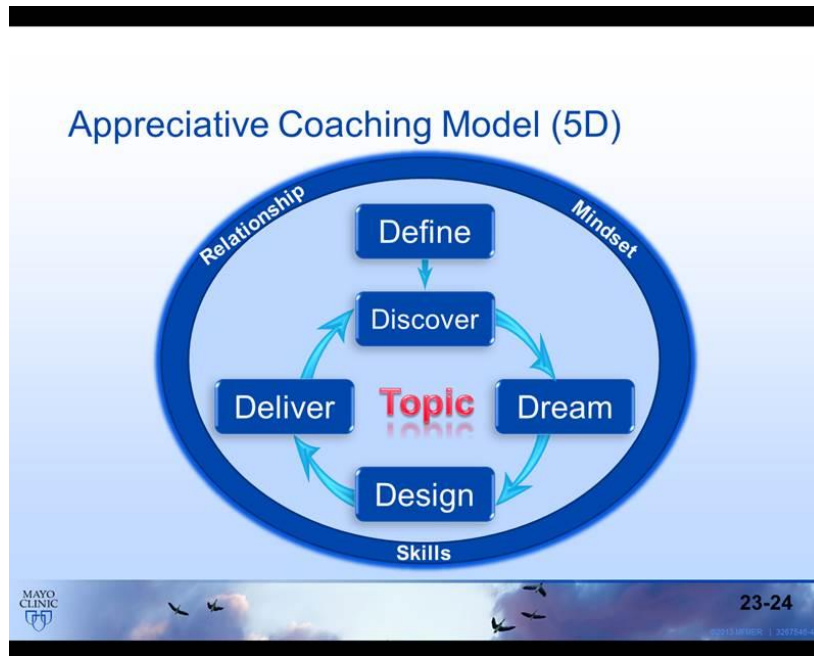
## **Coaching as a Faculty Development Tool**

Coaching and mentoring are often used interchangeably in the literature. Hierarchical relationships with noted disparities in experience are characteristic of most mentoring relationships. References to coaching and mentoring specific to this literature review refer to a relationship that lacks hierarchy or disproportionate levels of subject matter expertise and is reflective in nature. Of note, the term “mentor” is primarily used in medical education literature. Peer mentoring, the focus of this literature review, involves faculty of mutual interest and stature forming diads or triads to offer emotional support, information sharing, and career strategies.<sup>8</sup>

### **Appreciative Coaching**

Coaching can be characterized as a means for learning and development. In a sense, coaching is unlocking people’s potential to maximize their own performance.<sup>15</sup> Appreciative coaching is set apart from other coaching and mentoring philosophies. Grounded in the principles of Appreciative Inquiry, it focuses on what has and is working in an individual’s life and develops those strengths. This approach intends to generate positive changes in performance and personal development. The process may also serve as a means to guide one towards his or her goals as well as allow the mutual sharing of experiences and opinions to create agreed-upon outcomes. The collaboration, heightened by discovery, between the coach and coachee offers the opportunity to build a design for the future, develop strategies, and construct supporting actions that enable success.

Figure 1: Appreciative Coaching Model



Source: Mayo Clinic, Power of Coaching, 2015 <sup>1</sup>

Table 1: Appreciative Coaching

|          |   |
|----------|---|
| Define:  | Identify the topic<br>Understand the current state and the talent's point of view<br>Determine the consequences of continuing on this path<br>Create readiness for change   |
| Discover | Help the talent develop appreciative perspective of oneself<br>Build talent's self-esteem, self-efficacy<br>Discover the talent's skills and strengths<br>Expand the talent's vision and range of possibility         |
| Dream    | Value based and meaningful goals for the talent<br>Tie the goal with organizational mission and values<br>The talent gives a detailed description of the desired state<br>Coach gives affirmation                     |
| Design   | Brainstorm ideas together to come up with creative and innovation action plans to bring change<br>Find social and structural support<br>Discuss possible barriers and how to address them<br>Acknowledge and champion |
| Deliver  | Talent realizes the goal<br>Talent expands his/her capacity to perform<br>The coach supports the talent to sustain the change<br>Celebrate the accomplishment   |

Source: Mayo Clinic, Power of Coaching, 2015 <sup>1</sup>

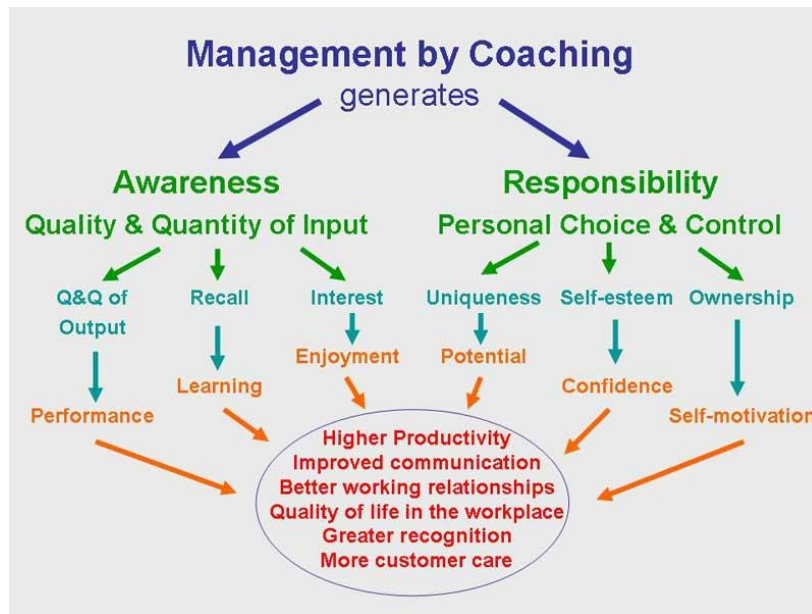
The appreciative model of coaching begins with an individual defining a problem or situation in which they identify needs improvement. <sup>1</sup> Reflection and analysis of the problem

leads the individual to acknowledge the current state of the problem and risks for continuing to tolerate the current situation. The discovery stage allows the coach to assist the individual being coached to acknowledge his or her own strengths and potential. Within the dream stage, the coachee creates a goal to address the defined problem. Working off of the strengths identified in the discovery stage and problem identified in the define stage, the coach assists the coachee to find creative solutions to address the problem. Finally, the delivery stage sees the goal to completion and the coach ensures accountability for future progress.<sup>16, 15</sup>

According to the appreciative coaching model, it is imperative to acknowledge what coaching is not. Coaching is not a means for one to act as an expert, having all of the answers, nor is it intended to direct one to take specific actions or to correct someone's behaviors or actions. Coaching is helping the coachee learn rather than teaching them. Good coaching avoids manipulation and coercion. The development of a coaching relationship allows the partnership to work together to improve performance. Different than mentoring, coaching can be described as the effort of "pulling out" as opposed to mentoring process of "putting in."<sup>17</sup> Through coaching one may help others to: (1) examine an individual's self-awareness of and strategies to employ strengths; (2) help with overcoming obstacles; (3) assists one to reach their full potential (not necessarily just performance) through continuous learning; (4) achieve new skills and competencies to become more effective; (5) clarify and work towards performance goals; (6) improve relationships; (7) increase job satisfaction and motivation; (8) develop more productive teams; (9) encourage creativity; (10) improve resource utilization.<sup>15</sup> Zenger also describes effective coaching and the impact it has on outcomes such as (1) giving new meaning to work; (2) engaged and committed employees; (3) high productivity; (4) stronger culture; (5) strengthened bonds between supervisor and employee; (6) healthier individuals; (7) resilience;

(8) heightened creativity; (9) increased risk taking and exploring; (10) mindset of an owner versus a hired hand.<sup>18</sup>

Figure 2: Benefits of Management by Coaching



Source: *Coaching for Performance*<sup>15</sup>

Successful coaching is characterized by the utilization of the core coaching skillsets of mindset, relationship, powerful questions, listening, feedback, and accountability, each of which will be described in detail in subsequent sections.<sup>1</sup> By paying careful attention to these values, the coach can facilitate the individual's ability to discover what it is they need and want, unearth their own answers, and take responsibility for acting on them.<sup>15</sup>

Recall is greatly improved when one is told, shown, and allowed to experience compared to when he or she is simply told. Whitmore<sup>15</sup> describes a controlled study originally performed at IBM and repeated by the UK Post Office in which a group of people were randomly divided into three subgroups, each group exposed to a differing method of education. Recall was significantly decreased when the participants were simply told how to do something.

Table 2: Recall Influenced by Telling, Showing, and Experiencing

|                       | Told | Told and Shown | Told, Shown, and Experienced |
|-----------------------|------|----------------|------------------------------|
| Recall after 3 weeks  | 70%  | 72%            | 85%                          |
| Recall after 3 months | 10%  | 32%            | 65%                          |

Source: *Coaching for Performance*<sup>15</sup>

### ***Appreciative Coaching Skillset: Mindset***

Each of the core skillsets associated with effective coaching are described in the following segments. The first core skillset associated with successful coaching involves the acknowledgement of mindset.<sup>19</sup> One's capacity cannot be reached without the proper mindset.<sup>20</sup> Dweck describes two types of mindsets, the fixed mindset and the growth mindset.

Dweck describes the fixed mindset as one's belief that his or her talents, intelligence, and basic abilities are simply fixed traits.<sup>20</sup> The growth mindset is built upon the idea that one's basic qualities can be cultivated through effort. Through application and experience, everyone is capable of growing and changing their innate talents, aptitudes, interests, or temperaments. Distinguishing characteristics of the fixed and growth mindsets as described by Dweck are detailed in the following table.<sup>20</sup>



Table 3: Fixed Versus Growth Mindset

|                         | Fixed Mindset   | Growth Mindset  |
|-------------------------|---|---|
| General Characteristics | <ul style="list-style-type: none"> <li>• My fixed ability needs to be proven</li> <li>• Failure is a setback and means I'm not smart or talented</li> <li>• Effort is a bad thing, only for people with deficiencies and means I'm not smart or talented</li> <li>• I want to make sure I succeed</li> <li>• I want my fixed qualities to be affirmed and praised</li> <li>• I thrive when things are within my grasp</li> <li>• I'm aiming to be flawless, perfect, not making mistakes</li> <li>• My potential is fixed and knowable now</li> <li>• I'm aiming to prove that I'm special, smart, and superior to others</li> <li>• Failure defines me..."I failed therefore I'm a failure"</li> </ul> | <ul style="list-style-type: none"> <li>• My ability can be developed through learning</li> <li>• Failure is not growing or not fulfilling my potential</li> <li>• Failure is an opportunity, not a condemnation</li> <li>• Effort makes me smart or talented and is the key to success</li> <li>• Success is stretching myself</li> <li>• I want to be challenged and encouraged to learn</li> <li>• I thrive on challenge</li> <li>• I learn from my mistakes and seek progress</li> <li>• My potential can be developed</li> <li>• Failure is painful, but doesn't define me</li> <li>• Failure is a problem to be faced, dealt with and learned from</li> <li>• Success is being my best self, not looking better than others</li> </ul> |
| Tendencies              | <ul style="list-style-type: none"> <li>• Protect themselves by not trying</li> <li>• Memorize course material in an unthinking manner in order to ace the exam</li> <li>• View others as judges of learning</li> <li>• View some people as naturally dim and so must have the same material drummed into them until they get it</li> <li>• Praise people for their ability</li> <li>• Reinforce negative stereotypes</li> </ul>   | <ul style="list-style-type: none"> <li>• Seize opportunities to learn by working hard</li> <li>• Devise better strategies in order to learn</li> <li>• View others as allies in learning</li> <li>• Believe that almost all people can learn if given the right conditions to learn</li> <li>• Praise people for their effort</li> <li>• Counter negative stereotypes by encouraging people to use and develop their minds fully</li> </ul>   |

Source: Dweck<sup>20</sup>

***Appreciative Coaching Skillset: Relationships***

Identified as the second core skillset of coaching, strong relationships must be established.<sup>1</sup> Without the presence of a meaningful relationship between the coach and the coachee, coaching cannot exist. A trusting relationship enables the conversation to have substance and meaning. Coaching cannot be forced; it must develop out of a trusting relationship and a genuine concern for the wellbeing of the other. In addition, vulnerability is necessary for a trusting relationship to exist. Without trust, people are often hesitant to speak up and fear conflict. Conflict is good and necessary for a strong team.<sup>21</sup> Unfiltered and passionate discussion is a hallmark to strong relationships and can drive out the potential in others. When a strong trusting relationship exists, individuals can be confident that their peers' intentions are good and that there is no reason to be protective or careful when together. Individuals can safely be themselves and recognize others' best interest. Within healthy relationships, vulnerabilities (weaknesses, skill deficiencies, interpersonal shortcomings, mistakes, requests for help) will not be used against the other and each individual can be vulnerable. This requires not only a willingness to be vulnerable but an effort to make it safe for others to want to be vulnerable. An environment must be present that makes it safe to add to the pool of shared meaning.<sup>22</sup> Each individual comes to the discussion full of his or her own opinions, feelings, theories and experiences. All parties must make it safe for others to share their own opinions, feelings, theories, and experiences. When all of the information and perceptions are present, synergy can take place.

In *Coaching for Performance*, Whitmore<sup>15</sup> describes engaging in behaviors that support a solid coaching relationship. Examples of such behaviors include: 1) maintaining confidentiality; 2) being fully present; 3) keeping your commitment; 4) being authentic; 5) being

honest and transparent: 6) being non-judgmental; 7) not being defensive; 8) letting go of the need to be right/competent; 9) letting go of the need to shine.

***Appreciative Coaching Skillset: Powerful Questions***

The third core skillset associated with strong appreciative coaching is the ability to ask powerful questions.<sup>1</sup> Asking questions allows one to understand the other person and determine his or her perspective, motivations, feelings and true concerns. They best generate awareness and responsibility. Asking powerful questions can accomplish the following: (1) produce answers; (2) stimulate thinking; (3) lead to self-awareness; (4) acknowledge a caring relationship; (5) provide valuable information; (6) empower others; (7) prompt exploration to new territory; (8) encourage people to open up; (9) lead to quality listening; (10) direct minds in a specific direction.<sup>15</sup>

Table 4: Open-ended Questioning for Coaches

|  |
|--|
| Open-ended questions invite participation and idea sharing as well as increase awareness. Use them to:   |
| <ul style="list-style-type: none"> <li>• Explore alternatives: “What would happen if...”</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Uncover attitudes or needs: “How do you feel about our progress to date?”</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Establish priorities and allow elaboration: “What do you think the major issues are with this project?”</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Be careful with “why” as it may imply criticism and evoke defensiveness.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Be the microscope of insight for the coachee. Probe deeper for more detail to keep the coachee involved and to bring into his consciousness those obscure factors that may be important.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Avoid leading or manipulating the conversation. Let the coachee drive the direction of the conversation by their areas of interest or answers to their questions. It is better to tell the coachee that you have a suggestion rather than attempt to manipulate the direction of conversation.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Begin broadly and focus increasingly on detail as the conversation progresses to maintain the coachee’s focus and interest.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Participate in active listening once the question is asked. Being present in the moment while avoiding the urge to concentrate on what you want to say fosters the conversation and exploration of the issue. The use of close-ended questions if done carefully. Telling or asking closed questions saves people from having to think. Asking open questions causes them to think for themselves.</li> </ul> |
| <ul style="list-style-type: none"> <li>• Focus the response: “Is the project on schedule?”</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Confirm what the other person has said: “So, the critical issue is cost?”</li> </ul>  |

Source: *Coaching for Performance* <sup>15</sup>

Table 5: Powerful Question Toolbox

|   |
|---|
| Powerful Question Toolbox:  |
| • “What else?”  |
| • “If you knew the answer what would it be?”  |
| • “What would the consequences of that be for you or for others?”   |
| • “What criteria are you using?”  |
| • “What advice would you give to a friend in your situation?”   |
| • “What is the hardest/most challenging part of this for you?”  |
| • “Imagine having a dialog with the wisest person you know or can think of. What would he or she tell you to do?” |
| • “What would you gain/lose by doing/saying that?”  |
| • “If someone said/did that to you what would you feel/think/do?”   |

Source: *Coaching for Performance* <sup>15</sup>

### ***Appreciative Coaching Skillset: Listening***

Listening is identified as the third skillset necessary in successful coaching. Active listening allows one to tune into the other person’s feelings and motivations. It also clarifies what is being said to avoid misunderstanding. Listening can fall within three distinct levels of listening; internal, focused, and intuitive. The first and most basic level of listening is most common. Internal listening is marked by inattention and a tendency to minimize, judge, interrupt, blame, negate, and justify, all of which block one’s ability to truly comprehend what is being said. Focused listening requires more focused attention on what is being said and the listening is more aware of not only what is being said but how it is being conveyed. Lastly, intuitive listening integrates both focused and internal levels of listening, characterized by sharp focus and an

intuitive sense of what is really behind what is being said. The following table describes each level of listening in greater detail.

Table 6: Listening

| Listening Levels   | Internal   | Focused   | Intuitive   |
|--------------------|--|---|---|
| Definition         | Our first level of listening; which is where we spend a lot of our time. The focus is on <i>what the words mean to us</i> . It is from this level of listening that we minimize, judge, interrupt, blame, negate, justify, and engage in other blocks of listening. It's also from this place, as coaches, that we wonder "what question should I ask next?" | Focused listening puts the attention on the talent, turning off the blaming, judging, negating, etc. You listen for the words the person is saying but also how the person is articulating through body language, tone of voice, etc. This gives you clues in to what is <i>really</i> going on with this person. | Intuitive listening integrates focused and internal listening levels but with the sharp focus toward the talent, particularly what's not being said by the talent, be it intentionally or unintentionally. The content is very important as a window into revealing who the person before you is. |
| Types of Questions | <p>"What does what I am hearing mean to me?"</p> <p>"She really needs to stop complaining!"</p> <p>"Ugh! That's so frustrating for him!"</p> <p>"Here is the advice I would give..."</p> <p>"What question should I ask next?"</p>   | <p>"This person seems frustrated."</p> <p>"This person seems to value ____."</p> <p>"Wow, this person just got really animated!"</p> <p>"This person's eyes are sparkling; she is passionate about solving this problem."</p>   | <p>"I think he wants me to know ____ about him."</p> <p>"Something seems 'off' about what she is saying and how she is behaving."</p> <p>"I sense there are conflicting needs here."</p> <p>"He has an assumption around ____."</p>   |
| Notes              | As a coach, the key is to notice when you are listening at Level 1 and find your way back "over there" with the client. Sometimes all it takes is asking a provocative, curious question. We hear our inner voice  | Star crossed lovers - Intently listening to every word.<br>Mom with a sick baby   | You are aware of the energy between you. This is also the level at which your intuition will be most available to you as well as metaphor and imagery   |

Source: *Power of Coaching*<sup>1</sup>

### ***Appreciative Coaching Skillset: Feedback***

The fifth skillset of coaching involves giving and receiving high-quality feedback.<sup>1</sup> In *Coaching for Performance*, Whitmore<sup>15</sup> insists that generating high-quality relevant feedback is essential for learning and continuous improvement in all aspects of life. Linked in the foundation of awareness and responsibility, proper feedback should be subjective and descriptive rather than personal and judgmental. Feedback must cover both the results of the action and the action process itself. Feedback is often delivered incorrectly because the person providing

feedback is looking at it from his or her point of view rather than that of the person receiving the feedback. Often the person giving the feedback says what they want to say without understanding the effects of what is said. If someone wants to truly bring out the best in another, one must refocus on a fundamental level. The primary objective must be to understand what the person receiving the feedback needs in order to perform the task well and to ask, say, or do whatever it takes to help him or her meet that need. The innate instinct to be in control or display superior knowledge will need to be set aside. Praise used in feedback and if given must be simultaneously generous, genuine, and judicious. Veenman also acknowledges important aspects of feedback encouraging statements that are: timely, sufficient, concrete, specific, and limited to a small number of performance issues.<sup>17</sup>

#### ***Appreciative Coaching Skillset: Accountability***

The final core coaching skillset addresses the importance of accountability.<sup>1</sup> Zenger reiterates in his book, *The Extraordinary Coach*, that accountability is crucial to see the results of the coaching exercise.<sup>18</sup> This allows the coach to guide the coachee through identifying and visualizing the specific actions necessary to proceed. Having clear expectations on how to proceed will increase the likelihood that those actions will take place. Assigning specific timelines to the most important milestones will facilitate a natural plan and check-in opportunities. Zenger also states that accountability plays a major role in growth, allowing it to happen faster than if it were absent.<sup>18</sup> The coach should articulate specific action steps that will assist the coachee in gaining clarity regarding what actions need to happen next. This will also provide the coachee with a clearer vision of how it will go and the coachee may identify additional sub-steps that must take place along the way. Finally, it is imperative that the coach realizes the importance of this step, is not afraid of intensity, and utilizes creativity to accomplish

the drive needed for the coachee to succeed.<sup>18</sup> The following table describes the actions needed to develop a successful accountability plan.

Table 7: Accountability

| <b>Lay Out a Success Plan</b><br>Create the detailed, actionable plan and follow-through that will lead to goal attainment |   |
|--|---|
| Develop and agree on an action plan and timelines  | What specific actions will help you achieve your goal?<br>What will your first steps be? When will you start?<br>Who can help hold you accountable?<br>How will you stay focused on your goals and plans? |
| Enlist support from others   | Who can support you in moving forward?<br>How can I support you? (Here's how I see my role...)  |
| Set milestones for follow-up and accountability  | Let's review our plans...<br>When should we touch base on this again?   |

Source: Zenger<sup>18</sup>

### Application of the Literature: Appreciative Coaching

The appreciative coaching model was chosen for this study because it is grounded in reflection and has been identified as a way to guide one towards his or her goals.<sup>15</sup> This model also builds upon the research by Rath, putting an emphasis on building on one's own strengths to maximize performance.<sup>23</sup>

All participants will attend the *Power of Coaching* course offered by the Mayo Clinic Office of Organizational Leadership and Development to be provided a foundational knowledge of principles grounded in appreciative coaching. Implemented in 2013, the course has currently served over 1,400 leaders within the Mayo Clinic health system. The curriculum of this course has been designed and utilized by certified coaches and is based upon the works of David



Cooperrider at Case Western Reserve University<sup>24</sup> as well as expert authors.<sup>15,16,18-20,25-29</sup>

Objectives of the course aim to provide the participants with the ability to (1) describe the value and impact of coaching in an organization; (2) learn to create a trusting coaching relationship with others by having the coaching mindset; (3) identify issues that can be addressed most effectively by using coaching methods; (4) demonstrate key coaching skills needed to engage in a coaching conversation for goal setting, performance improvement, and accountability. The six-hour course agenda includes (1) background and definition of coaching; (2) coaching mindset; (3) coaching practice using guided steps; (4) coaching relationship; (5) foundational coaching skills (powerful questioning, listening, feedback, acknowledging); (6) appreciative coaching model (define, discover, dream, design, deliver); (7) coaching practicum; 8) “how will you use coaching” discovery.

Travis Wilson will facilitate the *Power of Coaching* course. Travis holds a Master of Science in Education and Social Policy degree and is a certified Professional Co-Active Coach, granted by the prestigious Coaches Training Institute. He has extensive experience facilitating the *Power of Coaching* course through the Mayo Clinic Office of Organizational Leadership and Development with over ten years’ experience developing leadership skills to individuals, including high-level administrators.

The pre-coaching session modules focus upon the core skillset of appreciative coaching<sup>1</sup> (mindset, relationships, powerful questions, listening, feedback, accountability) as described above. Content is based on expert text-book literature<sup>15,18,20-23</sup> as well as the *Power of Coaching*<sup>1</sup> and *Coaching Connections* curriculums.

*Coaching Connections* is a program designed to supplement the learning experience of graduates of *The Power of Coaching* course. Participants meet for one hour on a monthly basis

and are given the opportunity to: (1)hone coaching skills and coach behavior by participating in a peer coaching session; (2) broaden coaching knowledge by probing into topic related content through the use of a micro-lecture; (3) garner coaching best practices by sharing past experiences during small or large group exercises.

Since its inception in 2014, 134 leaders within the Mayo Clinic health system have participated in *Coaching Connections*. Development of the *Coaching Connections* curriculum and structure was done by Travis Wilson and Carrie Bowler with close affiliation with other content experts within the Mayo Clinic Office of Organizational Leadership and Development. Carrie Bowler, MS, MLS is an Education Coordinator for Mayo Clinic Graduate Medical Education (GME) programs. Within this role, Carrie develops and modifies curriculum and assessment for 19 programs in addition to designing and providing faculty development opportunities and promoting instructional best practices among faculty.

Table 8: Coaching Connections Session Structure

|  |   |
|--|---|
| Each <i>Coaching Connection</i> session was created to be 50 minutes total in length and to follow the same outline: |   |
| I.   | Welcome & introduction (1 min) <ul style="list-style-type: none"> <li>Session format outlines and descriptions available via table documents and PowerPoint slide</li> </ul>  |
| II.  | Ice-breaker (3 min) <ul style="list-style-type: none"> <li>The goal of the ice breaker is to focus the audience on the content and immediately engage them; setting the stage for learning</li> </ul>   |
| III.   | Ice-breaker discussion (5 min) <ul style="list-style-type: none"> <li>Small group focused discussion with selected table large group share out</li> </ul>   |
| IV.  | Topic discussion & application (15 min) <ul style="list-style-type: none"> <li>Each topic incorporated a micro-lecture</li> <li>Opportunities to apply the knowledge gleaned through active learning activities</li> <li>Discussion allowed for assessment of learners on topics introduced</li> </ul>                                      |
| V.   | Individual coaching (20 min) <ul style="list-style-type: none"> <li>Participants were primed for the coaching session by reviewing the POC stages of coaching via the handouts supplied from the class</li> <li>Coaching topics were free for the talent to choose, however, the general theme revolved around the session topic</li> </ul> |
| VI.  | Wrap-up and commitment (5 min) <ul style="list-style-type: none"> <li>Large group share out of take aways</li> </ul>  |
| VII.   | Evaluation (1 min)  |

Motivation for the session assessment was to identify if the content and participation created deeper understanding and a means for applying coaching skills and concepts. Evaluations of the program have remained consistently high, with praise being garnered around its length, quality of content, and the experience to practice coaching.

## **Peer Coaching as a Faculty Development Tool**

The following segment describes the literature's focus on the execution of peer coaching efforts and the resulting outcomes. It's historical context and literary definitions are offered. The application of peer coaching will be divided into (1) outcomes; (2) factors associated with success; (3) detailed structure of chosen peer coaching study interventions; (4) risk factors identified with peer coaching. Lastly, peer coaching's impact on the subset of didactic instruction will be addressed.

### **Historical Context and Definitions**

The peer coaching model lacks a formal hierarchy between participants and is executed from a non-threatening environment. This ultimately nurtures relationships which are: collaborative, supportive, reflective, and problem-solving focused. All of these features are critical for successful professional development. Since the 1980's the term "Peer Coaching" has been studied in the realm of education as a way to facilitate incorporation of newly learned teaching strategies and techniques.<sup>30,31</sup> Joyce and Showers identified a large gap between the information that was learned at workshops and that of which was actually utilized in the classroom. After the introduction of on-site peer coaching, the transfer of learned teaching practices increased from 20% to 95%.<sup>31</sup> Literature reveals that peer coaching has been used in areas such as nursing,<sup>32</sup> education,<sup>33,34</sup> physiotherapy,<sup>35</sup> and business.<sup>36,37</sup>

Definitions found in the literature describe peer coaching as "a type of helping relationship in which two people of equal status actively participate in helping each other on specific tasks or problems, with a mutual desire to be helpful,"<sup>36 pg. 499</sup>. This definition acknowledges the fact that it involves a non-hierarchical relationship between the parties that

lacks both power dynamics and the presence of a professionally trained coach. It is grounded in elements of mutual growth, learning and development.<sup>38</sup> Ladyshefsky describes peer coaching as involving (1) a voluntary relationship based on collaboration rather than competition; (2) self-evaluation; (3) welcomed coach feedback; (4) establishment of goals; (5) focus on participant's strengths and amplification of potential.<sup>35</sup> Participation in informal mentoring behaviors has been linked to increased satisfaction when compared to formal mentoring.<sup>39</sup>

### **Outcomes Associated with Peer Coaching**

A study by Parker<sup>36</sup> attempted to discover outcomes of a peer coaching program. Dispersing a survey to several hundred students who had participated in a peer coaching program, Parker endeavored to identify both the characteristics of an effective peer-coaching relationship and the impact those characteristics offered. The qualitative data indicated that the peer coaching process lead to: (1) success in dealing with change; (2) support for personal and professional goals; (3) increased confidence; (4) improved accuracy on self-image; (5) development of soft skills; (6) fostering empowerment; (7) improved delivery of feedback. Overall satisfaction among participants was high and correlated to time spent on the process. Those participants who reported lower satisfaction also admitted less personal effort towards the program. In addition 75% of the respondents admitted to using peer coaching on their own after the formal peer coaching program had concluded.

A scoping review of the use of peer coaching by health care professionals indicated that peer coaching techniques are strongly supported.<sup>40</sup> Seventeen articles met the inclusion criteria and the author acknowledged several benefits of which included: (1) an effective means for collegial staff development; (2) increased self-awareness of clinical teaching behaviors; (3)

improved specific teaching skills; (4) improvements in collaborative relationship between colleagues; (5) increased levels of reflective thinking; (6) increased understanding and use of new skills; (7) decreased sense of anxiety; (8) improved transfer of knowledge and skills from the classroom to the clinical setting; (9) increased productivity; (10) gains in accountability practices.

Jacelon<sup>41</sup> describes the program developed to allow four tenure-track nursing educators to gain valuable research and scholarship experience by way of a peer coaching program. Meeting on a bi-monthly basis, the nurse educators utilized knowledge they had acquired in their doctoral programs as well as experiences gained by mentors to assist with the acquisition of skills necessary for faculty educator success. The peer coaching sessions were found to assist with achievement of collective scholarship productivity, improved research collaboration, increased mutual expertise, and stronger relationships with each other.

The reflective partnership described by Korthagen<sup>42</sup> led to stronger interpersonal relationships with students, superior job satisfaction, as well as greater feelings of security and self-efficacy. Peer coaching has been shown to promote a heightened self-awareness, greater adaptability, more active listening and inquiry, increases in authentic and effective interpersonal connections, and improvements in leadership capabilities.<sup>36,43</sup>

Sekerka sought evidence to support the mutual benefit afforded to the role of the coach using qualitative thematic analysis.<sup>44</sup> Responses indicated that the coaches involved in the peer coaching process were more likely to have a global viewpoint as well as an increased focus on others and appreciation for ongoing learning. Exemplified time was spent reflecting on the needs

of others. Coaches also acknowledged the impact that peer coaching had on their own personal development, self-confidence, and personal mastery of skills.

Improvements in productivity are acknowledged in Goldman's qualitative analysis of a structured peer coaching approach. Accounting for similar implementation challenges expressed by both cohorts, the group participating in the structured peer coaching process implemented 23% more of their planned initiatives. This included twice as many educational leadership initiatives and 3.5 times as many initiatives involving the development of new curriculum. In addition, faculty gained and continued use of lifelong coaching skills.<sup>9</sup>

In a peer mentoring/coaching program designed for junior clinician educators, Lord validated the self-sufficient and low-cost structure of such a program. Qualitative analysis of interviews, observation, and document analysis led to several results: (1) increased workplace satisfaction; (2) universal sense of improved social connection among participants; (3) increased professional productivity; (4) increased personal growth through accountability, collaboration, mutual learning, support, encouragement, advice, and information sharing.<sup>5</sup>

Moss and colleagues also describe benefits of a peer group mentoring/coaching process. Participants indicated a greater sense of collegiality and an increased likelihood to utilize the support of one another in the future as a result of the program. Participants also acknowledged an increase in the perception of confidence in their roles and abilities and described a greater sense of empowerment after participation in the program.<sup>45</sup>

In an effort to impact the academic skills of women faculty, Varkey facilitated a peer mentoring program. After meeting at regular intervals over a 12-month period, significant gains

were noted. Participants reported improvements in career satisfaction, greater engagement in academic pursuits, and progress towards achieving career goals.<sup>46</sup>

Medical educators can use their coaching expertise to improve instruction within the clinical setting as well. Ladyschewsky found that students that are part of a peer coaching group outperformed those who were not involved in this methodology.<sup>47</sup> Students exposed to peer coaching also reported higher levels of self-confidence and self-efficacy in his or her abilities.<sup>47</sup> Key components in these differences stemmed from the student's reduction of stress levels provided by coaching as well as learning by asking questions.<sup>47</sup>

Literature linking peer coaching or mentoring with medical educators has been positive as well. Qualitative analysis of a peer mentoring group provided to junior clinician educators identified benefits such as: (2) opportunity for peers at the same professional level to dialogue in a safe environment; (3) increased professional connection at a large institution; (4) increased social connection; (5) increased workplace satisfaction; (6) opportunities for improved self-awareness; (7) reduced intimidation and increased confidence of involvement in professional activities; (8) increased opportunities for mutual learning, support, encouragement, advice, and information sharing, resulting in personal growth and development; (9) additional opportunities to receive critical feedback, resulting in personal and professional growth, increased opportunities for professional collaboration; (10) heightened accountability.<sup>5</sup>

### **Factors Associated with Successful Peer Coaching Results**

Using theme analysis of program characteristics, Parker associated an increased likelihood of participants continuing peer coaching skills with relationship components. Parker<sup>37</sup> identifies the fact that those participants that have the capacity to build solid relationships, one

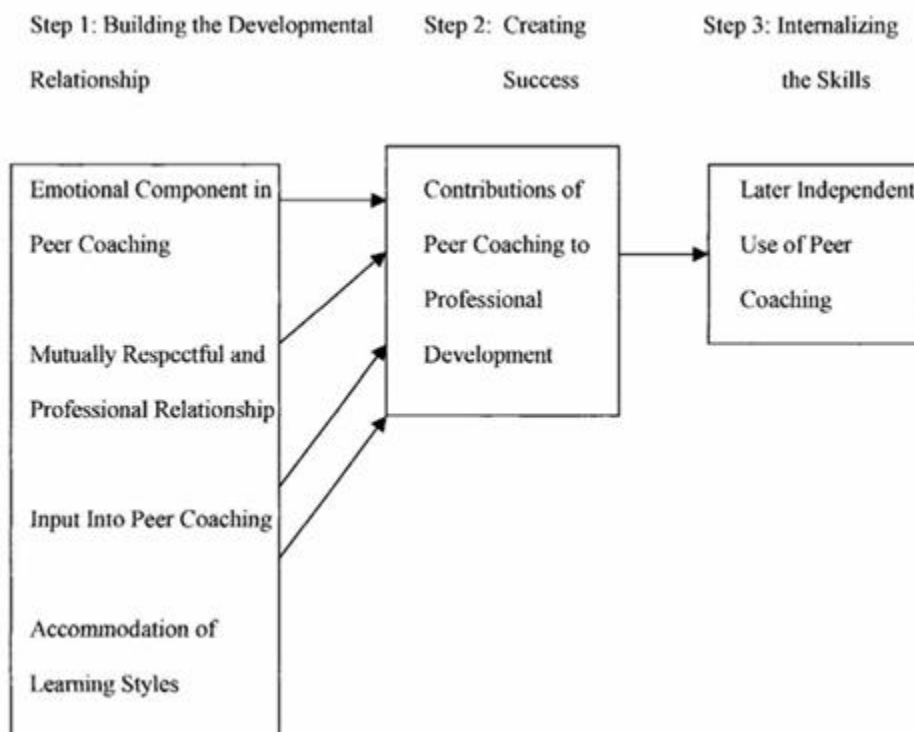


that is professional and mutually respectful, experience the most success. When active learning takes place within strong relationships, positive performance, satisfaction, and growth occurs.

32,48

Based on these results, Parker suggests that the acquisitions of peer coaching skills as well as a motivation for long term utilization of the skills are related to a three-step process.<sup>36</sup> The first step involves developing a good relational fit for the coaching partners. This relationship is characterized by accommodation of learning styles, building emotional rapport, and creating a professional and mutually respectful environment. The next step encourages a well-thought out plan to educate on peer coaching practices. If the preceding two steps are successful, the individual is more likely to progress to the final step of developing motivation, intent, and actual practice of peer coaching in the future.

Figure 3: 3-Step Process in Aquiring the Life-Long Use of Peer Coaching as a Learning Tactic



Source: Parker<sup>36</sup>

Based on the validated importance of relationships, Parker also offers additional components to facilitate a successful peer coaching program. Developing over time, partners must foster a climate of trust and support, acting as a critical friend. Partners are encouraged to be open and honest with themselves and others to produce authenticity. An emphasis on reflection and feedback should be fostered.<sup>36</sup>

Schwellnus' <sup>40</sup> scoping review indicated predictors of strong peer coaching programs include: (1) a non-hierarchical relationship between the peers; (2) a dyad or triad coach to coachee ratio; (3) voluntary participation; (4) collaborative or cooperative focus; (5) encouragement of self-reflection; (6) goal-directed and strengths-based coaching focus; (7) existence of feedback; (8) presence of a trusting relationship.

In the study by Moss, gains in participant collegiality and confidence were largely attributed to the process of reflection. The author describes the process of encouraging reflection increases the likelihood that participants will engage in new idea development and an improved willingness to apply them to new future situations. Moss also acknowledges that the nonhierarchical environment greatly contributed to the perceived support of the group, allowing participants to feel safe to think more freely and exchange ideas that could lead to additional reflection.<sup>45</sup>

Hunt's expertise, in *The coaching organization: A strategy for developing leaders*, recommends several necessary core elements to be included in the development of a peer coaching experience.<sup>49</sup> These include (1) voluntary participation; (2) training in coaching; (3)

selection of one's own coach; (4) coachee's decisions as to what to work on; (5) face-to-face contact; (6) a culture of trust; (7) reflection; (8) feedback; (9) and ongoing participation.<sup>49</sup>

### **Detailed Structure of Peer Coaching Programs**

Waddell describes the utilization of peer coaching to increase competence of clinical breast examination skills. Participants engaged in self-assessment, were introduced to training, given the opportunity to practice, and were given non-evaluative feedback.<sup>50</sup> The study validated the use of peer coaching to the staff development of health care professionals.

In Goldman's<sup>9</sup> qualitative analysis of a structured peer coaching program, graduates of a fellowship program at the George Washington University School of Medicine and Health Sciences were divided into two cohorts. One cohort (n=10) participated in a structured process of monthly reciprocal peer coaching, followed by journaling and quarterly interviews with the program director; a second cohort (n=9) functioned as a comparison with no structures process put in place for support. Goldman utilized recommendations by Hunt when forming the peer coaching structure<sup>49</sup> which emphasizes a trusting, on-going, and face-to-face relationship between participants to encourage reflection and feedback. Journaling was specifically chosen to provide faculty with the opportunity to reflect on both the implementation of their plans and the reciprocal peer coaching process. Faculty members were encouraged to journal shortly after the reciprocal coaching sessions and data was used in the qualitative analysis.<sup>9</sup> Results indicated the exercises provided faculty with focus, personal support, and structure.<sup>9</sup>

### **Risk Factors Associated with Peer Coaching**

In order for peer coaching to be successful, certain critical risk factors should be acknowledged and addressed. Due to the high degree of interpersonal connectivity, Parker

recognizes that although peer coaching is a well-documented asset to most professional relationships, there are risk factors that can affect the accomplishment of the program goals.<sup>37</sup>

Parker believes that when peers have a realistic understanding of the risk factors associated with peer coaching, appropriate preventative actions and remedy interventions can contribute to creating the conditions that support success. Based on relational learning concepts and using the ecological systems perspective, Parker describes several barriers to peer coaching success: (1) misaligned values and fixed mindset; (2) inadequate skills necessary to meet the peer's needs; (3) lack of self-awareness; (4) oppositional stance towards the relational or peer learning process; (5) unrealistic expectations; (6) a lack of motivation to help, learn, or engage in the process.

### **Using the Peer Coaching Paradigm to Improve Didactic Instruction**

Rooted in the arena of secondary education<sup>31</sup>, instructors seek the confidential and constructive observation and assessment from a peer educator. The experience allows a critical light to be shined upon assumptions that one may have about their own performance. The evaluated educator seeks the assessment from the peer and welcomes the constructive feedback necessary to foster awareness and greatest potential. Peer coaching was introduced to the field of medical education in the 1990's with much support for its use.<sup>44</sup>

Within the arena of educator development, peer coaching allows an educator to seek the perspective from that of a colleague on a defined behavior or skill. This collaborative relationship allows for colleagues to work together to inquire and reflect on current and future skills development. Ultimately this idea sharing exercise can lead to enhanced collegiality, feedback and support for both parties.<sup>51</sup> It is suggested that the frequency of these exchanges can account for some of the success, as described by Bowman when superior instructor

development was obtained by a peer coaching program when compared to the control group exposed to traditional supervision.<sup>30</sup>

Kinsella acknowledges the vulnerability involved in receiving feedback after peer observation of teaching practices.<sup>52</sup> Distinction between summative and formative evaluation must be recognized. Summative evaluation is formal and necessary for administration evaluation, while formative evaluation is designed to offer improvements in instruction. Kinsella also summarizes additional components to fostering a willingness to participate. Successful programs must be established in an environment of mutual trust, confidentiality, and support. The atmosphere must also encourage an educator to be willing to safely experiment, fail, reject, seek feedback and guidance, revise, and return to the classroom to try again.

A staged progression of peer coaching arrangements focusing on didactic instruction enhancement is offered by Kinsella.<sup>52</sup> Working within the non-judgmental peer coaching arrangements, participants partake in (1) pre-observation planning conference in order to determine specific observation criteria as well as the time and frequency of observations (Appendix A); (2) classroom observation and collection of data (Appendix B); (3) post-observation reflecting and data analysis. In addition the final step involves the establishment of future observational goals and data collection strategy development. Reflective practices amongst educators have been shown to encourage the development of better relationships with students and lead to higher job satisfaction and a heightened personal sense of security and self-efficiency.<sup>42</sup>

Reflective partnerships developed for the purpose of faculty development are also described by Killen and Vidmar.<sup>53,54</sup> This partnership was provided a structure in which each

participant observed the other's teaching through formal educational, technical and ethical criteria used to analyze and share. In a peer coaching technique described by Rice for healthcare providers,<sup>55</sup> faculty are encouraged to observe specific aspects requested by the peer educator which relate to his or her educational goal. Observational educators may also look for student reactions and responses to statements made by the instructor, off-task behavior of the students, as well as instructor approaches and behaviors. Rice also recommends that follow-up occur within 2-3 days of the observation, fostering some reflection time and memory enhancement.

Huston<sup>56</sup> and colleagues acknowledged that the benefits of a peer coaching program are not isolated to new or junior faculty. This pilot study included ten experienced senior faculty members from several programs, including one from the college of nursing who were exposed to a three stage peer coaching program. Implementation of the program included training workshops for coaching instruction and skills as well as the establishment of a reciprocal coaching partnership throughout one year. The following year nine out of the ten participant educators volunteered to coach faculty requesting the peer coaching service. Evaluations of the program were positive and participants acknowledged that they learned a lot about their teaching out of the experiences of coaching and being coached.

### **Application of the Literature: Peer Coaching**

Peer coaching has been identified as being collaborative, supportive, reflective, and problem-solving in nature. The definition offered by Ladyschewsky describes peer coaching as involving (1) a voluntary relationship based on collaboration rather than competition; (2) self-evaluation; (3) welcomed coach feedback; (4) establishment of goals; (5) focus on participant's

strengths and amplification of potential.<sup>35</sup> These characteristics line up well with the goals of this study and will provide a welcome means for accomplishment of such.

Outcomes of studies assessing the effectiveness of peer coaching have also provided validation for its use in an attempt to accomplish the goals of this study. Results of research in alignment with the study goals of improved satisfaction, confidence and collegiality conclude that the peer coaching process lead to: (1) support for personal and professional goals;<sup>2,46</sup> (2) increased confidence;<sup>2, 42, 44, 45</sup> (3) fostering empowerment and security;<sup>2, 42</sup> (4) overall job satisfaction among participants correlated to time spent on the process;<sup>2, 5,42,46</sup> (5) effective means for collegial staff development.<sup>40,41, 5,45</sup>

Many studies showed outcomes that align with this study's goal of participant utilization of coaching skills. Such outcomes include: (1) improved delivery of feedback;<sup>2,5</sup> (2) heightened sense of awareness;<sup>42</sup> (3) more active listening and inquiry;<sup>42</sup> (4) effective interpersonal connections;<sup>42, 5</sup> (5) heightened sense of accountability;<sup>5</sup> (6) use of peer coaching after the conclusion of the formal peer coaching program.<sup>2, 9</sup>

The impact of strong life-long coaching skills can lead to additional benefits in both the didactic and clinical arenas. Such benefits include: (1) students that are part of a peer coaching group outperformed those who were not;<sup>47</sup> (2) students exposed to peer coaching reported higher levels of self-confidence and self-efficacy in his or her abilities;<sup>47</sup> (3) student's reduction of stress levels as a result of coaching and learning by asking questions;<sup>47</sup> (4) improved transfer of knowledge and skills from the classroom to the clinical setting;<sup>40</sup> (5) improvement in specific teaching skills.<sup>40</sup>

In order to obtain the described outcomes, careful replication of the success factors described in the review was considered. The following factors are identified along with the associated application used in this study design. The first is the utilization of a non-hierarchical relationship between the peers.<sup>40</sup> All participants of this study are of similar expertise levels. No supervisors were invited to participate. A strong educational foundation of peer coaching principles is to be provided.<sup>9,36,49</sup> All subjects will participate in the introductory *Power of Coaching* course and will engage in monthly modules to reinforce the core coaching skillsets.

The next success factor is face-to-face, ongoing interaction.<sup>9,49</sup> Participants will engage in monthly face-to-face peer coaching sessions that will span a six month time-frame. Participants will also be encouraged to engage in peer coaching with their partners in between monthly sessions.

A goal-directed and strengths-based coaching focus is the next success factor.<sup>9,40,49</sup> Participants are encouraged to reflect and establish his or her own goal.<sup>9,49</sup> Participants will be required to develop their own individual goal prior to the start of the *Power of Coaching* session. Reflection upon and working towards this goal will be the focus of the coaching sessions and will be formally addressed both at the start of the study, during each monthly reflective journal session, and at the conclusion of the study.

The next success factor requires members to develop a collaborative or cooperative focus.<sup>40</sup> The development of a group goal and the monthly acknowledgement of the progression of goal attainment will encourage this collaboration. The group goal paired with the module emphasis on relationship and trust building as well as the establishment of carefully selected coaching triads will address the success factor of ensuring the presence of a trusting and



supportive relationship.<sup>40, 36, 45, 50</sup> To ensure a natural fit between the triad partners, participants are given the option to confidentially defer working with certain individuals prior to the first coaching session.<sup>36, 37</sup>

Encouragement of self-reflection is another identified success factor.<sup>9, 40, 45, 49</sup> To appreciate the importance of this factor, much emphasis is placed on the establishment of goals, probing questions contained within the monthly modules, reflective journaling and encouragement within the coaching process itself.

Lastly the existence of feedback as a success factor is acknowledged.<sup>9, 36, 40, 49, 50</sup> Special attention is made to encourage feedback delivery through the *Power of Coaching* course, the feedback module, and facilitator assistance during the monthly coaching sessions. Careful consideration of the risk factors identified by Parker was used to develop module content and overall study design.<sup>37</sup>

The utilization of peer coaching to improve didactic instruction was described above. To encourage the application of peer coaching for developing goals that pertain to didactic instruction, the study participants will be given instruction and access to pre-evaluation and observation tools (Appendix A and B).<sup>52, 55</sup> The encouragement of this will also align with this study's goal of participant utilization of peer coaching skills beyond the study period.

## **Goal Development**

The impact on goal development and progression is a primary outcome of this study. The following segment describes proper goal setting practices aimed to facilitate success. According to the Gallup research done by Tom Rath<sup>23</sup> in *StrengthFinder 2.0*, each person has a higher potential for success when they build upon existing strengths rather than overcome defined

personal deficiencies. In addition, work within the Gallup group has formulated that a strengths-based approach improves one's confidence, direction, hope, and kindness towards others. The strengths-based approach was developed out of a vision, led by a team of scientists, to identify a common language of talent. The results would allow individuals and organizations to describe what people do well in very specific terms. With a database consisting of over 100,000 talent-based interviews, researchers were able to identify patterns which ultimately led to 34 specific themes of talent. To create highly personalized theme descriptions, all responses produced by the talent inventory assessment tool are compared to the responses in a rich database consisting of over 5,000 talent characteristics. The report then produces an individualized result that characterizes what makes each participant unique. It is the identification of these areas where one has the greatest potential to develop strengths. The resulting report consists of five personalized dominant strengths. Along with a description of each strength theme, Rath supplies suggested ideas for action.

Table 9: StrengthsFinder 2.0 Talent Themes

|                                   |   |
|-----------------------------------|---|
| <b>Achiever®</b>                  | People strong in the Achiever theme have a great deal of stamina and work hard. They take great satisfaction from being busy and productive.  |
| <b>Activator®</b>                 | People strong in the Activator theme can make things happen by turning thoughts into action. They are often impatient.  |
| <b>Adaptability®</b>              | People strong in the Adaptability theme prefer to "go with the flow." They tend to be "now" people who take things as they come and discover the future one day at a time.  |
| <b>Analytical®</b>                | People strong in the Analytical theme search for reasons and causes. They have the ability to think about all the factors that might affect a situation.  |
| <b>Arranger™</b>                  | People strong in the Arranger theme can organize, but they also have a flexibility that complements this ability. They like to figure out how all of the pieces and resources can be arranged for maximum productivity.                                     |
| <b>Belief®</b>                    | People strong in the Belief theme have certain core values that are unchanging. Out of these values emerges a defined purpose for their life.   |
| <b>Command®</b>                   | People strong in the Command theme have presence. They can take control of a situation and make decisions.  |
| <b>Communication®</b>             | People strong in the Communication theme generally find it easy to put their thoughts into words. They are good conversationalists and presenters.  |
| <b>Competition®</b>               | People strong in the Competition theme measure their progress against the performance of others. They strive to win first place and revel in contests.  |
| <b>Connectedness®</b>             | People strong in the Connectedness theme have faith in the links between all things. They believe there are few coincidences and that almost every event has a reason.  |
| <b>Consistency® / Fairness™</b>   | People strong in the Consistency theme (also called Fairness in the first StrengthsFinder assessment) are keenly aware of the need to treat people the same. They try to treat everyone in the world fairly by setting up clear rules and adhering to them. |
| <b>Context®</b>                   | People strong in the Context theme enjoy thinking about the past. They understand the present by researching its history.   |
| <b>Deliberative®</b>              | People strong in the Deliberative theme are best described by the serious care they take in making decisions or choices. They anticipate the obstacles.   |
| <b>Developer®</b>                 | People strong in the Developer theme recognize and cultivate the potential in others. They spot the signs of each small improvement and derive satisfaction from these improvements.  |
| <b>Discipline™</b>                | People strong in the Discipline theme enjoy routine and structure. Their world is best described by the order they create.  |
| <b>Empathy™</b>                   | People strong in the Empathy theme can sense the feelings of other people by imagining themselves in others' lives or others' situations.   |
| <b>Focus™</b>                     | People strong in the Focus theme can take a direction, follow through, and make the corrections necessary to stay on track. They prioritize, then act.  |
| <b>Futuristic®</b>                | People strong in the Futuristic theme are inspired by the future and what could be. They inspire others with their visions of the future.   |
| <b>Harmony®</b>                   | People strong in the Harmony theme look for consensus. They don't enjoy conflict; rather, they seek areas of agreement.   |
| <b>Ideation®</b>                  | People strong in the Ideation theme are fascinated by ideas. They are able to find connections between seemingly disparate phenomena.   |
| <b>Inclusiveness® / Includer®</b> | People strong in the Inclusiveness theme are accepting of others. They show awareness of those who feel left out, and make an effort to include them.   |
| <b>Individualization®</b>         | People strong in the Individualization theme are intrigued with the unique qualities of each person. They have a gift for figuring out how people who are different can work together productively.   |
| <b>Input®</b>                     | People strong in the Input theme have a craving to know more. Often they like to collect and archive all kinds of information.  |
| <b>Intellection®</b>              | People strong in the Intellection theme are characterized by their intellectual activity. They are introspective and appreciate intellectual discussions.   |
| <b>Learner®</b>                   | People strong in the Learner theme have a great desire to learn and want to continuously improve. In particular, the process of learning, rather than the outcome, excites them.  |
| <b>Maximizer®</b>                 | People strong in the Maximizer theme focus on strengths as a way to stimulate personal and group excellence. They seek to transform something strong into something superb.   |
| <b>Positivity®</b>                | People strong in the Positivity theme have an enthusiasm that is contagious. They are upbeat and can get others excited about what they are going to do.  |
| <b>Relator®</b>                   | People who are strong in the Relator theme enjoy close relationships with others. They find deep satisfaction in working hard with friends to achieve a goal.   |
| <b>Responsibility®</b>            | People strong in the Responsibility theme take psychological ownership of what they say they will do. They are committed to stable values such as honesty and loyalty.  |
| <b>Restorative®</b>               | People strong in the Restorative theme are adept at dealing with problems. They are good at figuring out what is wrong and resolving it.  |
| <b>Self-Assurance®</b>            | People strong in the Self-assurance theme feel confident in their ability to manage their own lives. They possess an inner compass that gives them confidence that their decisions are right.   |
| <b>Significance®</b>              | People strong in the Significance theme want to be very important in the eyes of others. They are independent and want to be recognized.  |
| <b>Strategic™</b>                 | People strong in the Strategic theme create alternative ways to proceed. Faced with any given scenario, they can quickly spot the relevant patterns and issues.   |
| <b>Woo®</b>                       | People strong in the Woo theme love the challenge of meeting new people and winning them over. They derive satisfaction from breaking the ice and making a connection with another person.  |

Source: <http://www.strengthstest.com/strengthsfinderthemes/strengths-themes.html><sup>23</sup>

Using the classification of talents, Rath describes how investing in one's talent through time spent practicing, developing the skills, and building on one's talent knowledge base, can

lead to considerable improvements in the particular strength of an individual. Knowing one's individual talents and the talents of others can foster team development. When one is aware of their areas of lesser talent and can identify that the talent is possessed by another member of the team, appreciation, partnership, and collaboration can be encouraged to overcome one's deficit. In a sense, one develops his or her strengths and surrounds themselves with the people that possess the skills they lack for peak performance. Within the description of each strength theme, Rath has identified ways to work with others who possess a strength differing from that of the individual. This awareness and tools to work together, when themes vary, encourage collegiality.

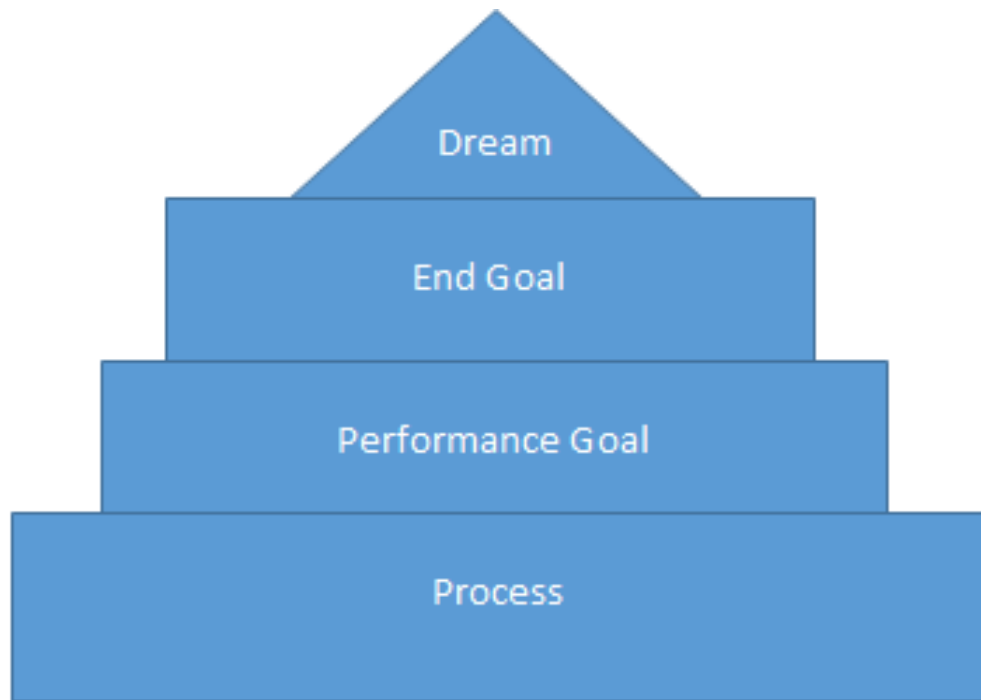
23

Goals should be developed with the long-term solution in mind after which realistic steps towards that goal are identified. Many teams set goals based on what has been done before rather than what is possible in the future.<sup>15</sup> In addition, he states that when the long-term vision is identified and the small goals that are set in motion to accomplish that end goal are applied, this approach yields goals that are considered more inspiring, creative, and motivating. At the foundational base of all proper goal-setting is awareness and responsibility, both of which are imperative to accomplishing overall end goals and the performance goals that one sets at the beginning of each coaching session. One must be aware of the current situation and the factors that impact it. In addition, responsibility, accountability, and ownership of the goal are critical to reach goal success.

To follow this suggested pattern for goal setting, it is important to define the difference between end goals and performance goals. The end goal describes the final objective and the goal itself is seldom entirely within the goal-setter's control. A performance goal allows one to

identify the performance level necessary to ultimately achieve the end goal. The performance goal is largely within the control of the goal setter and provides a means of measuring progress.

Figure 4: Goal Setting Processes



Source: Whitmore<sup>15</sup>

As described in *Coaching for Performance*,<sup>15</sup> there are well-defined qualities that are included in proper goal development. These qualities are specifically referring to the set performance goals that are needed to achieve the end-goal.

Table 10: Qualities Included in Proper Goal Development

| Qualities Included in Proper Goal Development                                 |  |   |
|---|--|---|
| S.M.A.R.T.:   | P.U.R.E.   | C.L.E.A.R.  |
| <ul style="list-style-type: none"> <li>• Specific</li> </ul>                  | <ul style="list-style-type: none"> <li>• Positively stated</li> </ul>                          | <ul style="list-style-type: none"> <li>• Challenging (encourages motivation)</li> </ul> |
| <ul style="list-style-type: none"> <li>• Measurable</li> </ul>                | <ul style="list-style-type: none"> <li>• Understood (avoids inaccurate assumptions)</li> </ul> | <ul style="list-style-type: none"> <li>• Legal</li> </ul>                               |
| <ul style="list-style-type: none"> <li>• Agreed</li> </ul>                    | <ul style="list-style-type: none"> <li>• Relevant</li> </ul>                                   | <ul style="list-style-type: none"> <li>• Environmentally sound</li> </ul>               |
| <ul style="list-style-type: none"> <li>• Realistic (instills hope)</li> </ul> | <ul style="list-style-type: none"> <li>• Ethical</li> </ul>                                    | <ul style="list-style-type: none"> <li>• Appropriate</li> </ul>                         |
| <ul style="list-style-type: none"> <li>• Time phased</li> </ul>               |  | <ul style="list-style-type: none"> <li>• Recorded</li> </ul>                            |

Source: Whitmore<sup>15</sup>

In addition to all of the above mentioned characteristics, special consideration should be made to successfully develop a team-oriented goal. Whitmore describes in *Coaching for Performance*<sup>15</sup> the following considerations in team end-goal development: (1) each team member formulates their various goals; (2) each team member provides the necessary input to a clear understanding of the reality; (3) resources and ideas of the whole team are employed to brainstorm options; (4) agreed upon plan is reached and driven forward by the will of the group.

To facilitate progress goals, the team leader should assist the team members with an analysis of the team's past performance of a task. This enables each member of the team to examine in detail their individual contribution to the overall task. Team members are then encouraged to share their answers with the others and resolve any conflicting changes. This process is thorough, brings out detail, ensures clarity and understanding, draws on the resources

of the team, and builds self-esteem and self-motivation. Whitmore<sup>15</sup> suggestions beginning each session with the G.R.O.W. model framework for goal setting.

G: Goal setting for the session as well as short and long term goals

R: Reality checking to explore the current situation

O: Options and alternative strategies or courses of actions

W: What is to be done, When, by Whom, and the Will to do it

### **Application of the Literature: Goal-Setting**

Content expertise describing the correct process to identify and develop goals are described above.<sup>23 15</sup> Each participant will be provided a *StrengthsFinder 2.0* book and the accompanying strengths assessment prior to the first day of the study. Participants will be encouraged to reflect upon an individual goal prior to the first day as well. Encouragement to use one's strengths during goal identification will be given. The detailed content described in the above Goal-setting segment will be shared with participants during the goal-setting portion of the introductory class following *Power of Coaching* by way of a PowerPoint presentation and discussion.

Identification of goals and the progress made to reach them will be the focus of the peer coaching sessions and will provide a focus for the coaching sessions. Working through the goals will allow practice of coaching skills. It is the hope that goal attainment will also lead to improvements in confidence and satisfaction. The group goal's purpose is to address the concept of collegiality.

## Collegiality

The impact on collegiality is also a primary outcome of this study. The following segment describes the importance of collegiality as well as factors designed to develop it. A team may be identified as “a small number of people with complementary skills committed to a common purpose, performance goals and ways of working together for which they hold themselves mutually accountable.”<sup>57</sup> Identification of what makes a team successful or not can be accurately described by Patrick Lencioni’s book.<sup>21</sup> Lencioni describes an interrelated model of dysfunction that inhibits a team’s ultimate success of the achievement of collegiality. If deficiencies in the execution of any of the basic steps occur, the likelihood of the team’s full potential is unlikely.

The foundational level of such dysfunction can be characterized by an absence of trust. In order for trust to be accomplished, members of the team must be willing to demonstrate vulnerability. Deficiencies in this level will likely lead to deficiencies of the next. The second level of dysfunction is the fear of conflict. For a team to be successful, members must be willing to participate in an open, unfiltered, and passionate debate of ideas. If ideas are guarded, full potential is difficult to achieve and will likely lead to deficiencies of the next level, that being a lack of commitment. If members are unwilling or unable to share their ideas in open and supported debate, commitment to the cause is unlikely to occur. Poor achievement in the previous stages will likely lead to the avoidance of accountability. When deficiencies in this category occur, team members are hesitant to call out their peers on counterproductive actions or behaviors, affecting the good of the team. If a team enables itself to encourage a lack of accountability, inattention to results may occur. Team members subject to this level of dysfunction are likely to put their own interests over the collective good of the team.



Figure 5: Five Dysfunctions of a Team




Source: Lencioni <sup>21</sup>

Lencioni provides a Team Assessment aimed at identifying which, if any, dysfunctions are perceived by the reader's own team. In addition, detailed characteristics of each dysfunction are provided along with suggestions for overcoming the identified dysfunction.

Parker also acknowledges the importance of strong relationships and states that when engagement in the relationship occurs, it can lead to a number of benefits for those involved. Such benefits include improvements in self-esteem, acquisition of new skills and knowledge, empowered action, and a deeper desire for additional connection.<sup>37</sup> Horn also describes the benefits that a peer coaching program can have on the existing team's sense of collegiality. Major themes following the qualitative analysis of a peer coaching experience included collaboration, collegiality, communication, and cooperation.<sup>58</sup>

In *Coaching for Performance*, Whitmore<sup>15</sup> describes a team development staging process that includes inclusion (forming), assertion (storming) and cooperation (performing). In the cooperation stage, people who feel established in the team begin to support one another and more importantly, trust one another. Members of a team described in the cooperation level also experience more commitment to the team, patience and understanding of each other, as well as humor and enthusiasm. There is also a noticeable willingness to challenge ideas and debate issues constructively. The team is also aligned well towards the achievement of its goals.

Figure 6: The Development of a Team



| Team development stage   | Characteristics |  | Maslow's hierarchy of needs       |
|--------------------------|-----------------|--|-----------------------------------|
| COOPERATION (performing) | Interdependent  | Energy directed outward to common goals  | Self-actualizing                  |
| (norming)                |                 |  |                                   |
| ASSERTION (storming)     | Independent     | Energy focused on internal competition   | Self-esteem<br>Esteem from others |
| INCLUSION (forming)      | Dependent       | Energy turned inward within team members | Belonging                         |
|                          |                 |  | Coaching for performance pg. 138  |

Source: Whitmore<sup>15</sup>

Teams perform their best when they reach the cooperative stage and acquisition of this stage can be facilitated by the coaching process using the G.R.O.W. framework. If the agreed upon goal (G) is to lift the team into the cooperation stage and the reality (R) is that it is now somewhere in the inclusion and assertion stages, the coach can help the team to determine what options (O) the team has and what will (W) be done. Whitmore also provides suggestions to

allow achievement of team cooperation. (1) Each team member should be invited to contribute to the development of a set of common goals. In addition, each team member should be allowed to add any personal goals that might be embraced within the overall team goal. (2) All team members should agree to and abide by a set of ground rules or operating principles.<sup>15</sup>

Feedback is an important component in coaching and is vital for learning and performance improvement. Through coaching, participants are able to refine their ability to seek and deliver feedback. Not only will the development of proper feedback address several dysfunctional components of team development, educators will be more likely to seek and deliver feedback to their students. Proper delivery of feedback will ultimately improve the educator's effectiveness in their role.<sup>15</sup> Utilizing peer feedback through peer coaching has been linked to increases in colleague-relatedness. Relatedness in turn has a significant relationship to job satisfaction.<sup>59</sup>

Building a shared vision is integral in team development. When a group does such, each individual's contributions become integral to the success of the group as a whole.<sup>60</sup> Faculty development can then strive to build collaboration and teamwork that fosters learning as a goal for each member. When members of a group feel safe and supported, they are more likely to take risks and try out new strategies. The utilization of reflection and feedback allow such innovative strategies to be developed and education caliber improvement to take place.<sup>61</sup>

### **Application of the Literature: Collegiality**

Because feedback and relationships are also considered core peer coaching skillsets, careful attention was made to deliver the associated content through the monthly modules. Healthy and trusting relationships are at the foundation of a successful coaching interaction.

Deliberate focus to this point was made when developing the face-to-face coaching sessions, the coaching triad partnerships, and the utilization of a team goal. Each participant will also be provided *The Five Dysfunctions of a Team* book and accompanying team assessment tool prior to the start of the study. When addressing the team goal at the start of each month's coaching practicum, each team member will be invited to contribute to the development of the common goal. In addition, each team member will be allowed to add any personal goals that might be embraced within the overall team goal. All participants will be encouraged to treat one another with respect, offer respectful and professional feedback and utilize accountability practices.<sup>15</sup>

### **Literature Search Process**

This section describes the search strategy used to obtain pertinent literature to provide background and support for this study. Searching strategies were based on the following:

- Faculty development approaches for medical graduate faculty
- The use of peer coaching within faculty development initiatives for anesthesia graduate school faculty, medical educators, or other graduate faculty
- Peer coaching or peer mentoring defined as a non-hierarchical mentoring relationship and lacking a vast difference in subject expertise between mentor and mentee

Included literature was limited to those printed in the English language but did not exclude studies conducted outside of the United States of America. Full text and publication by a peer-reviewed journal was necessary for inclusion. Included studies were those using a scientific approach to evaluate the suggested process. Articles which included expert opinion and literature consultation without a formal evaluation process were used for background information only. Hierarchical mentoring as a focus of the article was used for background information; however

only those articles that described a non-hierarchical relationship between the coach/mentor and coachee/mentee were included. The environmental focus of the literature included graduate, not secondary education. Information on the use of peer coaching for secondary education was reserved for background information.

See Appendix E for details on the included scholarly literature aimed to address the study interventions. Research articles are organized according to topic focus. The first articles concentrate on faculty development. The second section emphasis is on literature relevant to coaching and peer coaching. Finally, the third section's focus is on the didactic classroom application of peer coaching.

A review of CINAHL with Full Text was performed using the following strategy: S1= "Peer Counseling" OR "peer coach\*" OR "peer mentor\*" OR ((coach\* OR counsel\* OR mentor\*) N3 (peer\* OR colleague\*)) (MH "Faculty Development" OR MH "Faculty+" OR professor\* OR instructor\* OR "teaching staff" OR teacher\* OR educator\*), S2= (MH "Faculty Development" OR MH "Faculty+" OR professor\* OR instructor\* OR "teaching staff" OR teacher\* OR educator\*), S4= S1 AND S2, S5= (MH "Mentorship") AND peer\*, S6= S2 + S5, S7= S6 NOT S4 Limiters - Published Date: 20000101-20141231; English Language; Peer Reviewed; Publication Type: Journal Article Search modes - Boolean/Phrase. The search resulted in 13 records. Two records were duplicates from different data bases. Nine records were excluded because of its focus on a hierarchical mentoring relationship and a vast difference in subject expertise between mentor and mentee. Two records were included in the final analysis.

A review of PubMed using the following strategy (("Faculty"[MAJR] OR faculty OR instructor\* OR educator\* OR teacher\* OR professor\* OR "teaching staff") AND ("Mentors"[MAJR] OR coach\* OR mentor\* OR counsel\*) AND peer\*) NOT student\* ) yielded 30 results. Five articles were duplicates found in other databases. Eight articles were excluded because they did not include a peer mentoring or coaching component. Ten articles were excluded due to its focus on a hierarchical mentoring relationship and a vast difference in subject expertise between mentor and mentee. One article was considered for background information due to the fact that the content was based on the author's expertise and literature consultation on peer coaching in addition the effectiveness of the suggested process was not assessed. Six articles were included in the final analysis.<sup>5,6,39,45,46,62</sup>

A review of ERIC using the following strategy ((DE "Peer Counseling" OR DE "Mentors" OR mentor\* OR coach\* OR counsel\*) AND (DE "College Faculty" OR DE "Faculty Development" OR DE "Graduate School Faculty" OR faculty OR professor\* OR instructor\*) AND peer\*) NOT student\* yielded 69 results. The following limits were instituted to narrow the results: Limiters - Peer Reviewed; Date Published: 20000101-20151231; Publication Type: Books, Journal Articles Search modes - Boolean/Phrase) and yielded 34 results. Three records were duplicates from other databases. One article was excluded due to the lack of involvement in any aspect of coaching or mentoring. One article was excluded due to its focus on secondary, not graduate education. One article was excluded because of the limited population and focus on oppression and stereotyping. One article was excluded due to the focus on leadership development only. One article was excluded because the evaluation lacked scientific basis. Four articles were excluded due to the inability to obtain full text. Conference abstracts were excluded, numbering five articles. Five articles were excluded because its focus on a hierarchical

mentoring relationship and a vast difference in subject expertise between mentor and mentee. Six articles were considered for background information due to the fact that the content was based on the author's expertise and literature consultation on peer coaching in addition the effectiveness of the suggested process was not assessed.<sup>8,54,63-65 66,67</sup> Six articles were included in the final analysis.<sup>14,68 ,59 ,58,69</sup>

A review of EMBASE using the following strategy (("Faculty"[MAJR] OR faculty OR instructor\* OR educator\* OR teacher\* OR professor\* OR "teaching staff") AND ("Mentors"[MAJR] OR coach\* OR mentor\* OR counsel\*) AND peer\*) NOT student\* ) yielded 8 results. Two articles were duplicates from other databases. Two articles were used for background information due to the fact that the content was based on the author's expertise and literature consultation on peer coaching in addition the effectiveness of the suggested process was not assessed.<sup>13,70</sup> Four articles were included in the final analysis.<sup>2,9,44,71</sup>

A review of Medline using the following strategy (("Faculty"[MAJR] OR faculty OR instructor\* OR educator\* OR teacher\* OR professor\* OR "teaching staff") AND ("Mentors"[MAJR] OR coach\* OR mentor\* OR counsel\*) AND peer\*) NOT student\* ) yielded 3 results. One article was a duplicate found in another database. One article was excluded because it was a commentary. One article was used in the final analysis.<sup>55</sup>

A review of EBSCO MegaFILE using the following strategy (("Faculty"[MAJR] OR faculty OR instructor\* OR educator\* OR teacher\* OR professor\* OR "teaching staff") AND ("Mentors"[MAJR] OR coach\* OR mentor\* OR counsel\*) AND peer\*) NOT student\* ) yielded 8 results. Two articles were duplicates located in other databases. One article was excluded due to the inability to obtain full text. Two articles were considered for background information due

to the fact that the content was based on the author's expertise and literature consultation on peer coaching in addition the effectiveness of the suggested process was not assessed.<sup>72,54</sup> One article was excluded due to its focus on secondary, not graduate education. Two articles were included in the final analysis.<sup>56,73</sup>

## **Gaps in the Literature**

The following section describes gaps in the current literature. With resounding evidence, literature supports the need for educator development initiatives. While there are many works that provide suggestions for faculty development programs, many of these are based solely on unscientific reviews of the literature and expert opinion. Few have a systemized way to assess the results of the suggested programs. In addition, few include qualitative means to assess the richness of the faculty development programs.

Much literature exists on the use of peer coaching for didactic instruction in secondary education. Research focusing on the collegiate and notably graduate education arenas is lacking. The use of the Appreciative Coaching Model specifically is needed. Even though many authors explore peer coaching's benefit to faculty development, very few describe such in a systematic, research driven approach. Such articles have relied on an unscientific review of the literature and expert opinion. While some literature describes the use of peer coaching in medical graduate education, none describe a structured peer coaching approach. More so, none describe a peer coaching's influence on educator effectiveness, educator job satisfaction, educator confidence, collegiality, and goal attainment and the interrelatedness of such. None consider anesthesia or nurse anesthesia medical educators. A substantial amount of research has been conducted to understand teacher job satisfaction in the K-12 grade levels; however, little is known about job satisfaction as it relates to the collegiate or graduate education levels.<sup>59</sup> In addition, there



remains little evidence on what faculty experience in a peer coaching environment as they transform from their existing roles into one of a medical educator. Medical education literature acknowledges the benefits to mentoring programs. Very few research articles however consider and focus on the non-hierarchical peer mentoring or coaching relationship.

With the call to reform medical education programs, necessity to meet accreditation requirements, demand to integrate education technology, and the desire to serve a diverse learner population, it is imperative for faculty to be confident in education strategy and develop a system of support as they step into new territories. This study seeks to understand the experience peer coaching plays on faculty educator development. Specifically, what aspects of peer coaching support the development of nurse anesthesia medical educators with varying education backgrounds and experience?

## **Theoretical frameworks**

In this section, theoretical frameworks used to develop the structured peer coaching curriculum as a faculty development tool is expanded upon. Theories supporting with the use of coaching as a faculty development tool include the Social Learning Theory, the Conscious Competence Learning Model, Transpersonal Psychology, Maslow's Hierarchy of Needs, and the Cooperative Learning Model.

The following section includes a detailed description of the Kirkpatrick Model for Evaluating Educational Outcomes as a conceptual framework. Because effectiveness is difficult to define, this model is used as the framework to assess educator effectiveness for this study. Finally, philosophical qualitative research theory of phenomenology is described as a means of capturing the qualitative data to prove effectiveness. While research articles do not always

directly define the philosophical position used in their qualitative construct, a detailed description of methods used to gather qualitative data does provide the reader with the acknowledgment of a formalized and preconceived plan to gather such data.

### **Theory to Support Coaching for Faculty Development**

#### ***Social Learning Theory***

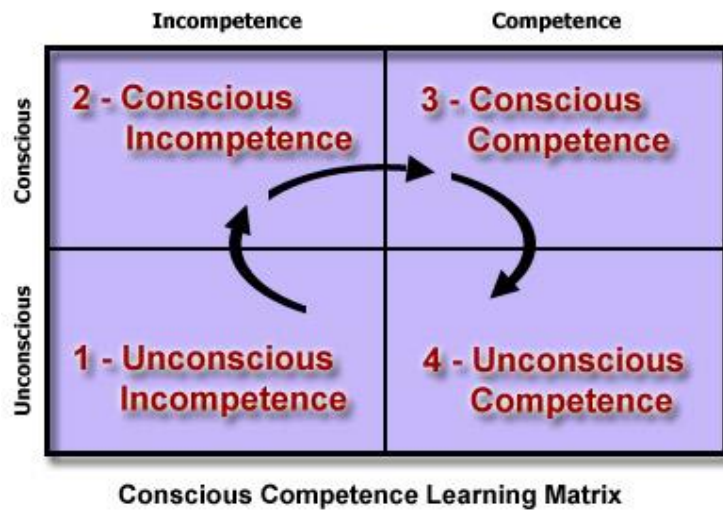
The Social Learning Theory is the first theory described to support the use of coaching for faculty development. Coaching uses the Social Learning Theory to engage participants into active learning. Social constructivists characterize learning as the socialization into a new knowledge community. Active participation of the student into the learning community is involved along with the internalization of the socially constructed meaning.<sup>74</sup> Major sources of learning can occur if the student is exposed to socializing experiments, collaborative learning with peers, and direct engagement into the culture of the learning environment. Within the social learning theory, emphases on reflective examination of one's actions serve as the basis for continued professional improvement.<sup>59</sup>

#### ***Conscious Competence Learning Model***

The second theory describing coaching's positive impact on faculty development is the Conscious Competence Learning Model. This learning model describes the process of skill acquisition. The first stage of this model describes how individuals are initially unaware of what they do not know. After the initial awareness, the individual makes a conscious effort to acquire the skill, after which they consciously use the skill. The reflection and inquiry characteristic to coaching allow an individual to reach this awareness stage. Eventually, the individual uses the skill without being consciously aware of doing so or how they are doing so. It is at this stage that

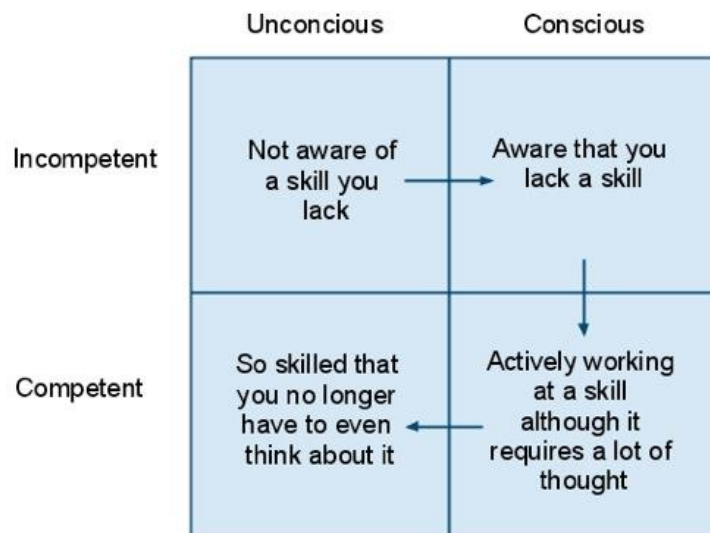
competence is considered to be established.<sup>15</sup> Using reflective activity and coaching practice, acquisition of high level skill can be readily acquired.

Figure 7: Conscious Competence Learning Matrix (1)



Source: Whitmore<sup>15</sup>

Figure 8: Conscious Competence Learning Matrix (2)



Source: Whitmore<sup>15</sup>

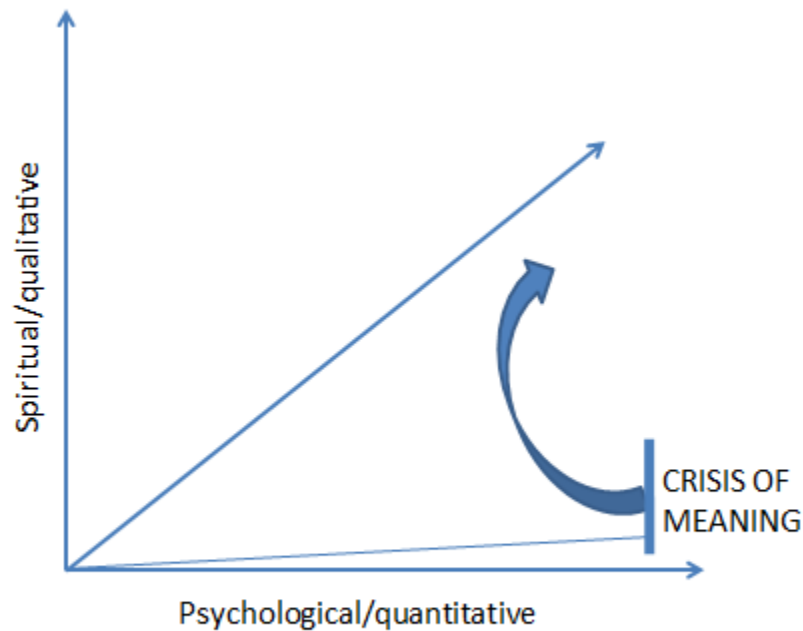
*Transpersonal Psychology*

Using transpersonal psychology, one can better appreciate the role a coach has on the progression of self-awareness and development, thus supporting the impact coaching can have on a successful faculty development program. Transpersonal psychology builds on previous descriptions of humanistic psychology but expands on the need for a deeper sense of the will, the experience of meaning, purpose and direction, personal responsibility, and placing others before self. The transpersonal psychology theory postulates that each individual has a deeper identity or a higher will or organizing principle. Whitmore's <sup>15</sup> approach to this claims that purpose can be considered transpersonal and meaning is humanistic. A psychosynthesis-trained coach will invite the individual being coached to reframe life as a developmental journey, to see the creative potential within problems, see obstacles as stepping stones, and to invite the awareness that all individuals have a purpose in life of which to overcome. The coach will focus questions with an aim to seek the coachee's recognition of positive potentials of the issues at hand as well as the actions he or she chooses to take. Transpersonal coaching methods may encourage the individual being coached to reach beneath the rational, logical, and limited mind into the subconscious.

Through transpersonal coaching, the coach can trace one's life experiences on a two-dimensional graphical model. The horizontal axis represents material success and psychological integration. The vertical axis represents values or spiritual aspiration. A 45-degree line between the two axes represents wisdom in which the individual's ideals lie between the extremes of indiscriminately exploited knowledge and spiritual fanaticism. The more one progresses along either path to the exclusion of the other, the more likely they are to depart from the ideal or balanced life and the more likely they are to experience the resulting tension.

If one prioritizes social or business pressures or the blind determination to achieve, they risk being pulled back by the tension that strives for equilibrium. This point is called the crisis of meaning. When an individual experiences the crisis of meaning point, he or she will likely bounce into a temporary shock state characterized by confusion and performance regression. Coaching can assist one to regain equilibrium while at the same time gather insightful meaning and introspection that accompanied the crisis of meaning point in time.

Figure 9: Two Dimentions of Growth

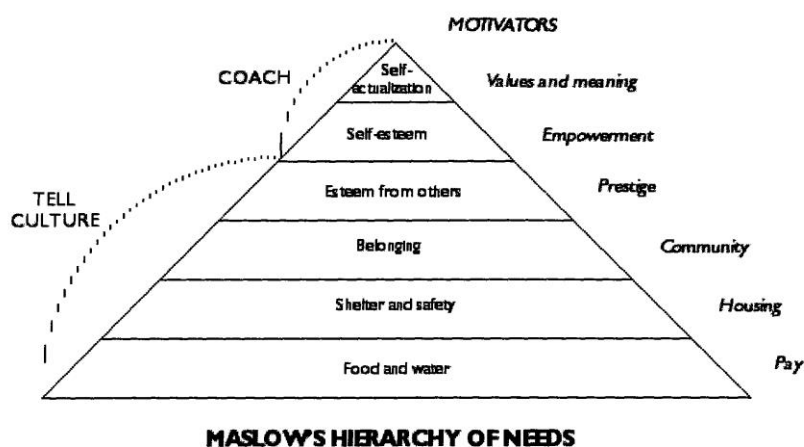


Source: Whitmore<sup>15</sup> pg 207

### *Maslow's Hierarchy of Needs*

By acknowledging Maslow's Hierarchy of Needs, one can appreciate coaching's impact on a faculty development program. Maslow describes a way of psychological thinking that leads to motivated behavior. In his pyramid, Maslow insists that in order to meet the higher level needs, all needs before it must also be met. In Whitmore's <sup>15</sup> adaption of Maslow's pyramid, he acknowledges that self-esteem and self-actualization lead to a superior level of motivation compared to those at the bottom of the pyramid, such as esteem from others and belonging. Because those individuals who reach a level of self-actualization are attempting to meet the need of meaning and purpose in their lives, they want their work, their activities, and their existence to have value and contribution to others. Coaching specifically focuses on developing self-esteem and self-actualization; therefore, by utilizing coaching to develop these traits, motivation can be increased.

Figure 10: Maslow's Hierarchy of Needs



Source: Whitmore <sup>15</sup>pg 109

***Cooperative Learning***

The final theoretical framework used to acknowledge the benefit of using coaching for faculty development is the Cooperative Learning Theory. Peer coaching belongs to the cooperative learning pattern. Cooperative learning has proven more successful than competitive or individually focused learning in relation to knowledge acquisition and problem solving creativity.<sup>35,75</sup> The very essence of cooperative learning enables individuals to achieve enhancements in cooperation between peers.<sup>35</sup> Cooperative learning has also shown to increase cognitive growth.<sup>47,76</sup>

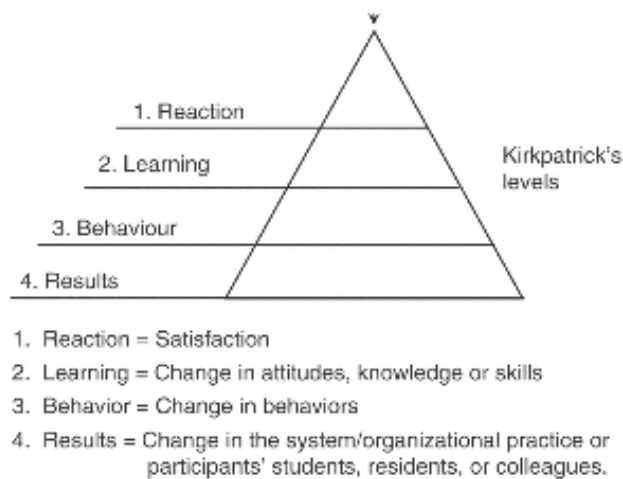
***Kirkpatrick's Model for Evaluating Educational Outcomes: Conceptual Framework***

The following segment describes the role of Kirkpatrick's Model for Evaluating Educational Outcomes intended to explain and describe educator effectiveness for this study. Effectiveness is difficult to define. Without proper definition, proper measurement cannot be performed. Witherspoon and White<sup>77</sup> describe four prominent functions of coaching: coaching to enhance skill, coaching to increase performance, coaching for development, and coaching for strategic planning. The classifications of learning described in Kirkpatrick's Model of Educational Outcomes<sup>78</sup> allow a means to assess each of these prominent coaching functions. To classify and analyze outcomes, we used Kirkpatrick's model. This model was chosen to classify and analyze outcomes in an effort to define "effectiveness." This model is designed to provide a holistic and compressive analysis of program development. The model describes four, non-hierarchical, levels of outcome. The first of the categories corresponds to the learner's reaction to the educational experience. The second category involves learning, referring to changes in attitudes, knowledge and skills. Behavior is identified in the third category, recognizing if a

change is present in the learner's behavior and application of learning in practice. The final category of results refers to change at the level of the learner as well as the organization.

Kirkpatrick's model has been validated by the works of Issenberg<sup>79</sup> and Freeth.<sup>80</sup> An adapted and validated version used by Steinert<sup>2,81</sup> was used in this study. By acknowledging and measuring the described components used in this model for coaching, effectiveness can be defined.

Figure 11: Kirkpatrick's Model for Evaluating Educational Outcomes



Source: Steinert<sup>2</sup>



Table 11: Kirkpatrick's Model for Evaluating Educational Outcomes

|          |  |   |
|----------|--|---|
| Level 1  | <b>REACTION</b>  | Participants' views on the learning experience, its organization, presentation, content, teaching methods, and quality of instruction   |
| Level 2A | <b>LEARNING</b> —Change in attitudes   | Changes in the attitudes or perceptions among participant groups towards teaching and learning  |
| Level 2B | <b>LEARNING</b> —Modification of knowledge or skills                             | For <i>knowledge</i> , this relates to the acquisition of concepts, procedures and principles; for <i>skills</i> , this relates to the acquisition of thinking/problem-solving, psychomotor and social skills |
| Level 3  | <b>BEHAVIOR</b> —Change in behaviors   | Documents the transfer of learning to the workplace or willingness of learners to apply new knowledge & skills  |
| Level 4A | <b>RESULTS</b> —Change in the system/organizational practice                     | Refers to wider changes in the organization, attributable to the educational program  |
| Level 4B | <b>RESULTS</b> —Change among the participants' students, residents or colleagues | Refers to improvement in student or resident learning/performance as a direct result of the educational intervention  |

Source: Steinert <sup>2</sup>

### ***Phenomenology***

In this final theoretical framework segment, phenomenology is described. Because reaction, learning, behavior, and results are difficult to assess quantitatively, qualitative research is necessary to put Kirkpatrick's model to use. To perform superior qualitative research, a defined and systematic process should be employed. One such philosophical theory of qualitative research is the study of phenomenology. Phenomenology is the exploration of an individual's perception of an experience, or the "study of lived experience." It is the perception unique to the individual and is apart from the event as it exists externally to the person. Phenomenological

research studies individuals in an attempt to understand that person's perceptions, perspectives and understandings of a particular situation (or phenomenon).

The first two steps in the process aim to reduce bias from the observing researcher. A central component to phenomenological reduction is the process of bracketing. Through the process of bracketing, the researcher identifies and excludes any preconceived beliefs and opinions that one, including the researcher, may have about the phenomenon that is being researched. The next step in phenomenological research involves the intuition state of the researcher. In this stage, the researcher must remain open to whatever phenomenological meaning occurs from those experiences it. The researcher is then able to acknowledge a common understanding about the phenomenon being studied. The third step in phenomenological research involves the analysis of the data. Researches attempt to code and categorize the qualitative data in an effort to suggest themes that make sense of the experience. Finally description can be accomplished in which the researcher understands, defines and describes the experience related to the event or phenomenon.

Small sample sizes, usually less than ten, are often used do to the onerous methods required to describe the experience. The researcher relies on open-ended questions by way of interviews, journals, and observation to collect data.<sup>82,83</sup> With proper qualitative research processes, the quality of data acquisition can be ensured and protected.

### **Summary of Theoretical Frameworks**

Coaching as a faculty development tool makes use of several theoretical frameworks including psychological, learning, and behavioral theories to support its approach. Using the conceptual framework developed through the Kirkpatrick Model for Evaluating Educational

Outcomes, one can assess effectiveness through assessments of reaction, learning, behavior, and results.

### **RESEARCH QUESTIONS AND HYPOTHESES**

The following section describes the research questions and accompanying hypotheses. A table summarizing all hypotheses can be found at the conclusion of this section (Table 12).

1. *How does the implementation of a structured peer coaching curriculum for faculty graduate medical educators influence nurse anesthesia educator effectiveness?*

I hypothesize that the participants will be more effective educators after the conclusion of the peer coaching curriculum. Effectiveness is defined using the levels described by Kirkpatrick's Model for Evaluating Educational Outcomes. A detailed description of the Kirkpatrick model is located in the *Theoretical Frameworks* section of this manuscript. Hypotheses describing effectiveness based on this model are described in detail below.

- Kirkpatrick's Level 1: Reaction
  - I hypothesize that the participants in the peer coaching curriculum will find the program is a useful educational tool as defined by the program evaluation obtained through the qualitative post-participation interview.
- Kirkpatrick's Level 2A: Learning-Change in Attitudes
  - I hypothesize that the integration of a formalized peer coaching curriculum will enhance the participants' attitudes and perceptions towards teaching and learning, specifically collegiality, satisfaction and confidence.
- Kirkpatrick's Level 2B: Learning- Modification of Knowledge and Skill

- I hypothesize that the integration of this program will enhance the acquisition of participants' coaching skills
  - Kirkpatrick's Level 3: Behavior Change
    - I hypothesize that participation of the peer coaching program will enhance the progression of personal and group goal development.
  - Kirkpatrick: Level 4: Results- Change among participants' students or colleagues
    - I hypothesize that the participants will engage in coaching behavior towards their each other, their students, and clinical educators after the conclusion of the formal peer coaching curriculum.
2. *How does the implementation of a structured peer coaching curriculum for faculty graduate medical educators influence the collegiality of the educator group?*
- I hypothesize that the peer coaching curriculum program will enable more collegiality among medical educator participants. Focus on building relationships during the module instruction, identification of a group goal at the onset of the study, and working through the progression of the group goal by way of peer coaching should foster teamwork.
3. *How does the implementation of a structured peer coaching curriculum for faculty graduate medical educators influence educator confidence?*
- I hypothesize that participation in the peer coaching program will foster educator confidence through reflection, feedback and supportive knowledge provided by peers.
4. *How does the implementation of a structured peer coaching curriculum for faculty graduate medical educators improve educator job satisfaction?*

Instructor job satisfaction has been linked to work performance as indicated by instructor involvement, commitment, and motivation.<sup>59</sup> I hypothesize that the integration of a formalized peer coaching curriculum will enhance the participants' attitudes and perceptions towards teaching and learning, specifically job satisfaction (Kirkpatrick's Level 2A: Learning-Change in Attitudes).

5. *How does the implementation of a structured peer coaching curriculum for faculty graduate medical educators influence educator goal attainment?*

Through the initial introduction of successful practices of goal setting and a formal partnership of coaching through goal progression, I hypothesize that personal and team goal identification and attainment will be fostered by the peer coaching curriculum program.

6. *How does the implementation of a structured peer coaching curriculum for faculty graduate medical educators influence educator coaching skills?*

By introducing foundational coaching concepts during the *Power of Coaching* course, reinforcing key properties of successful coaching through the on-line modules and coaching session instruction, reflecting on coaching progress and components through monthly journal exercises, and participating in monthly peer coaching practicums, I hypothesize the participants will be introduced to and develop their knowledge and use of peer coaching. I also hypothesize that participants may utilize the components of peer coaching to seek out instructional peer coaching experiences to achieve personal goals that may relate to didactic instruction.

7. *How does the implementation of a structured peer coaching curriculum for faculty graduate medical educators influence the likelihood that participants will execute coaching skills three months after the conclusion of the program?*

I hypothesize that the participants will engage in coaching behavior towards each other, their students, and clinical educators after the conclusion of the formal peer coaching curriculum (Kirkpatrick: Level 4: Results- Change among participants' students or colleagues).

Table 12: Summary of Hypotheses

| Summary of Hypotheses                              |  |
|--|--|
| At the conclusion of the study, participants will: | <ul style="list-style-type: none"> <li>• be more effective educators</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>• engage in a more collegial relationship with each member of the team</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>• admit to greater confidence in his or her role as an educator</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>• perceive greater educator job satisfaction</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>• improve the likelihood of personal and team goal identification and attainment</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>• have developed his or her knowledge and use of coaching skills</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>• engage in coaching behavior towards each other, their students, and fellow clinical educators beyond the study timeframe</li> </ul> |

## **METHODOLOGY AND DESIGN**

The following section describes the methodology and design of this study. Participants, study design, implementation strategies and outcomes measures will be described in detail. A visual diagram depicting the implementation components of the study (Figure 13) is included

along with a logic model (Table 15) and literary description of the contents at the conclusion of this segment.

## **Participants and Setting**

All nine core faculty members from the Mayo Clinic Certified Registered Nurse Anesthesia (CRNA) Graduate medical education program, excluding the Program Director, will be invited to participate in this study. Participation is voluntary. Because the study is supported by the Mayo Clinic Certified Registered Nurse Anesthesia (CRNA) Graduate medical education Program Director (allowing meeting time and resources), 100% participation is anticipated.

The sample will include nine core faculty educators who devote at least 0.4 FTE to the setting of formal graduate education. Graduate education is provided to students pursuing their Masters of Anesthesia or Doctor of Anesthesia Practice degrees through the Mayo School of Health Sciences, Nurse Anesthesia Graduate Program. Clinical experience of the medical educator faculty will vary from 2 to 11 years and formal education experience will range from 6 months to 5 years. Formal educational duties include but are not limited to didactic classroom instruction, course coordination, workshop instruction and coordination, student scheduling, enrichment experience development and maintenance, certification exam preparation, student research advising, student mentoring, clinical rotation supervision and development, and addressing student behavior issues.

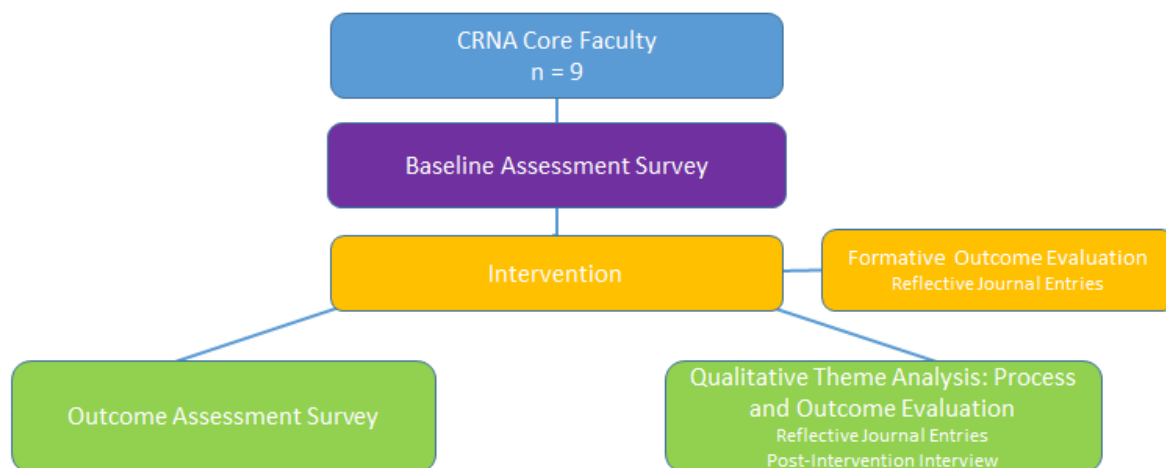
The Mayo School of Health Sciences is located in Rochester, Minnesota's third largest city. The population of Rochester is approximately 107,000 with a median household income of \$57,957. The city's major employer is the Mayo Clinic, which serves high acuity patients from all over the world.

IRB exemption was granted by the Mayo Clinic and later by the University of Michigan, Flint through the formal application processes. The University of Michigan, Flint ceded authority to the Mayo Clinic for this study. Participation is voluntary and subjects will be instructed that they may withdraw at any time. In addition, participants may refuse to answer sensitive questions if they so choose. No risks to reputation or criminal repercussions exist to the participants. Subjects will be assigned a participant number in order to protect their identity and ensure confidentiality and data blinding. The participant number will be used to match all assessment tools to each individual for final analysis.

## Design

Subjects will represent a convenience sample. The study will follow a mixed-method design. The summative outcome evaluations will be quasi-experimental one group pre-post-test and post-test qualitative. The formative outcome evaluation will have a qualitative design.

Figure 12: Study Design





## **Recruitment and Introduction of Study**

All core faculty members of the Mayo Clinic CRNA Graduate education program, excluding the Program Director to foster a non-hierarchical format, will be introduced to the study by the researcher for recruitment and informational purposes. The researcher will provide all subjects with a written description of the study, including time and effort expectations as well as compensation details. (Appendix C). Compensation for each participant includes personal copies of the *StrengthsFinder 2.0* and *Five Dysfunctions of a Team* books, \$180, and all meals during face-to-face activities. The researcher will provide the opportunity for questions at this time and will obtain oral consent from all willing participants (Appendix D). During the consent process, potential participants will be reminded that all portions of the research study must be fulfilled to receive monetary compensation; participants are however able to withdraw from the study at any time without personal or professional risk.

## **Introduction to Coaching**

All consented participants will attend a six hour introductory class entitled *Power of Coaching* offered by the Mayo Clinic Office of Leadership and Organization Development. The purpose of this class is to use an established means to introduce the concepts of appreciative and peer coaching. Details of the course and facilitator credentials can be found in the *Literature's Impact on Study: Appreciative Coaching* section of this manuscript.

## **Goal Setting**

An additional two hours will be set aside after the *Power of Coaching* course for the purpose of goal development. Participants will be introduced to literature-inspired means to

identify and set goals by way of a PowerPoint presentation (Appendix F). Curriculum details are described in the *Goal Setting* section of this manuscript and were developed by the author.

Utilization of the *StrengthsFinder 2.0* assessment will be encouraged as a starting point for personal end goal selection. The *StrengthsFinder 2.0* assessment tool requires each participant to quickly and intuitively answer a series of personality questions. After comparing one's responses to the Strengths Theme database, each participant is issued a list of their five most predominant talents or strengths. Details of the 34 talent themes can be found in Table 9 within the *Goal Setting* section of this manuscript.

The group will also define a team goal. Both the individual and team goals must meet the S.M.A.R.T goal standard and the timeline must fall within the allotted six months of the program. S.M.A.R.T. goal details and additional goal setting theory is described in the *Goal Setting* section found within the literature review of this manuscript.

## **Preparatory Modules**

Prior to each in-person session, each participant will be expected to complete an online module utilizing the designated Black Board site. The modules are designed to take no longer than 15 minutes to complete. Produced by Articulate, Storyline 2 software, each of the six online modules will feature a core skillsets associated with successful coaching. Core skillsets, in order from first to last include: (1) Mindset; (2) Relationship; (3) Powerful Questions; (4) Listening; (5) Feedback; (6) Accountability. Module curriculum was developed by the author and inspired by coaching literature and the established *Coaching Connections* program offered through the Mayo Clinic Office of Leadership and Organization Development.<sup>15,18,20,21</sup> Module content detail is described in the *Appreciative Coaching* section of this manuscript. *Coaching Connection*

curriculum details and facilitator credentials are described in the *Literature's Impact on Study: Appreciative Coaching* section of this manuscript.

### **Face-to-Face Coaching Sessions**

Following the introductory *Power of Coaching* and Goal setting day, participants will meet for one hour on a monthly basis for six months to engage in the study curriculum. Support for the face-to-face sessions was given by the CRNA Graduate Program Director. Sessions were made possible during faculty time and scheduling was facilitated by program administrative assistant resources. The frequency and time allotment is based on and validated by Mayo's *Coaching Connection* program and the study design described by Goldman.<sup>9</sup> A detailed description of Goldman's study design can be found in the *Detailed Structure of Peer Coaching Programs* section of this manuscript.

Each hour-long peer coaching session will begin with a 20 minute instructional devotion to the designated core coaching skillset that correlates to the assigned online module. The content of the mini-lectures is borrowed from the *Coaching Connections* curriculum. Following the instructional portion, led by the *Coaching Connections* facilitator Carrie Bowler, participants will engage in a 40 minute peer dialog practicum.

At the beginning of each coaching practicum, the coaching facilitator will spend 5 minutes addressing the team goal and will coach the group through the process of performance goal accomplishment. Questions which may be used to elicit this information for the coaching process could include: <sup>15</sup>

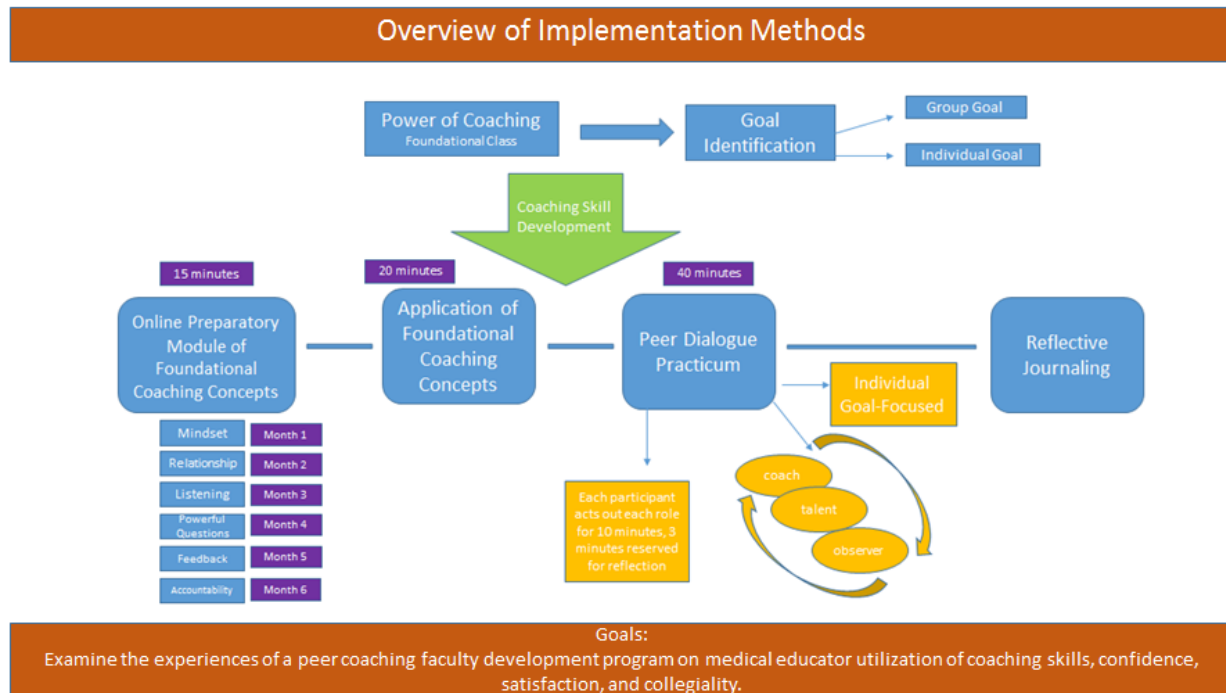
Table 13: Group Goal Question Prompts

|  |
|--|
| What is the most difficult/time-consuming/stressful part of the task for you?    |
| How long did it take?  |
| What was difficult about it?   |
| What would you do differently next time?   |
| Who needs to know about the changes you will make?                               |
| What support do you need? From whom? How will you get it?                        |
| If you did that, how might it affect the result/the others/the quality/the time? |

During the remaining 35 minutes of the coaching practicum, the group will be divided into three sets of three educators or triad. Each member of the triad will assume each of the three defined roles for ten minutes each. The three roles include coach, talent (coachee), and observer. The role of the talent must identify to his or her coaching partner what their individual end goal is and what performance goals are necessary to accomplish the end goal. The coach uses the skills learned in the *Power of Coaching* course and online modules to coach the talent through progression of the goal. The coaching session may assist with performance goal development or expand on existing performance goals previously identified at past coaching sessions. The role of the observer is to assess the coaching interaction and provide valuable, non-judgmental feedback on the coaching process. To facilitate objective observation, the participant will be encouraged to utilize the observational assessment tool utilized in the *Power of Coaching* Curriculum (Appendix G). After ten minutes, the roles are rotated, ensuring that everyone functions in all three roles by the end of the session. The final five minutes are reserved for reflection of the experience. Participants will be encouraged to utilize their coaching partners in between sessions

to encourage individual goal progression. Members of each triad will remain with their coaching triad team throughout the six month practicum.

Figure 13: Overview of Implementation Methods



## Logic Model

A logic model is a graphical tool often utilized to depict a logical relationship between different components of a program, such as resources or inputs, activities, outputs and outcomes.

<sup>84</sup> Each of these is briefly described below.

Table 15: Logic Model

| Inputs  | Activities  | Outputs  | Outcomes  |
|---|---|--|---|
| \$10,000 EERA Grant Budget<br>(Shared with Mayo Pathology's Medical Education<br>ent) | <i>Power of Coaching</i> course to introduce coaching   | 9 core faculty nurse anesthesia educators                        | <b>Short:</b><br>Better understanding of coaching |
| Meals for 7 face-to-face sessions   | <i>Strengths Finder 2.0</i> strengths inventory assessment completion to introduce concept of strengths-based goals     | 1 Face-to-face coaching skillset mini-lecture month for 6 months | Recognition of personal strengths                 |
| <i>Strengths Finder 2.0</i> Book  | Goal-Setting course to introduce concepts of setting proper goals   | 1 Face-to-face coaching sessions per month for 6 months          | <b>Medium:</b><br>Increased collegiality          |
| <i>5 Dysfunctions of a Team</i> Book  | Preparatory modules to introduce core principles of skillsets   | 1 Blackboard course  | Development of personal strength                  |
| Articulate Storyline software   | Face-to-face instruction to expand upon core skillsets of coaching  | 1 Blackboard preparatory module per month for 6 months           | Development of individual goal                    |
| NVvio Software  | Development of an individual goal   | 1 Reflective Journal Script per month for 6 months               | Development of group/team goal                    |
| <i>Power of Coaching</i> facilitator x2   | Development of a group/team goal  | 1 Goal-setting course  | Increased reflective practices                    |
| <i>Coaching Connections</i> facilitator x1  | Coaching practicum to practice coaching skills  | 1 individual goal per participant                                | Development of self-confidence as an educator     |
| Blackboard course site  | Reflective journaling to facilitate reflection  | 1 group goal   | Development of increased job satisfaction         |
| Meeting room to conduct face-to-face sessions   | Participate in additional coaching dialog and pertinent activities in-between monthly coaching sessions when applicable | 3 coaching triad groups  | Improved comfort in coaching practices            |

|  |   |
|--|---|
| Time within participant's schedule to participate in face-to-face sessions | Comfort with effective feedback   |
| <i>Power of Coaching</i> course contents                                   | Long:<br><br>Completion of group/team goal<br>Completion of individual goal                                   |
|  | Utilization of coaching skills beyond the study period towards faculty colleagues, students, and fellow CRNAs |
|  | Improved educator effectiveness   |

## Inputs

The inputs in a logic model represent the resources that are needed for the program to operate. Examples of inputs include: staff, money, and equipment. Details of study inputs are summarized in Table 15. Secured time allotment and meeting facilities must be secured for all participants in order to carry out the *Power of Coaching* and Goal Development curriculums. Scheduled time and facilities are also needed for the monthly hour long face-to-face coaching sessions. Each participant must have access to the Black Board course and be familiar with its use to participate in the online modules and reflective journaling.

Resources have been secured through the Mayo Clinic Office of Organizational Leadership and Development to provide the *Power of Coaching* instruction by Travis Wilson. Resources were also provided by this department for curriculum development and consultation.

Carrie Bowler, Mayo Clinic Coaching Connection coordinator, has been available for curriculum and study consultation and development, as well as assisting with acquisition of the Mayo Clinic Endowment for Education Research grant. She will also be providing the role of peer coaching session facilitator during the monthly in-person sessions. In addition to facilitating the sessions, she will be observing behavior for the purpose of gathering qualitative data for this study. Carrie will also assist in the assessment of qualitative data pertaining to this study.

The Endowment for Education Research Award (EERA) grant was awarded for this study to be shared between the Mayo Clinic Nurse Anesthesia Graduate Program and the Mayo Clinic Pathology Medical Education Department in the amount of \$10,000. The available grant monies supplied the literature given to each participant (*StrengthsFinder 2.0*, *Five Dysfunctions of a Team*). The *StrengthsFinder 2.0*<sup>23</sup> content is described in the *Goal Setting* section for the *Review of the Literature* portion of this manuscript. The *Five Dysfunctions of a Team*<sup>21</sup> is described in the *Relationships* content found within the *Appreciative Coaching* content of the literature review segment of this manuscript. The grant also supports the food provided for the in-person session and a participation compensation of \$180 each to all participants who complete all required components of the study. In addition, equipment was purchased to support the development of the curriculum and data collection. Refer to the budget table below for details.



Table 16: Budget

| Resource  | Amount   | Justification  |
|---|--|--|
| Articulate Storyline License                      | \$489.00   | Content creation for online modules  |
| NVivo Software License                            | \$1340.00  | Qualitative research software to organize, collate, theme, the research findings   |
| Livescribe Echo Smartpen Voice Recorder and paper | \$112/pen x 2 and paper tablets<br>\$15/tablet x 2 = \$254.00      | Digitally record the participant interviews and session debriefing field note findings   |
| Food/Beverage                                     | Food/Beverage, \$12/person(10) x 6<br>Sessions=<br>\$720.00        | Breakfast/lunch for sessions   |
| Donor Volunteer Payments                          | Target 9 participants @ \$30/session x 6<br>Sessions=<br>\$1620.00 | Compensation for faculty time commitment to participate in the research study  |
| Internal Services                                 | \$1,300  | Creation of a standardized interview guide and reflective journal entry prompts. Master level statistician/data analyst will support data coordination, study design and statistical analysis. |
| Coaching Subject Matter Expertise                 | \$0  | Office for Leadership and Organization Development commitment of mentoring from Travis Wilson  |

### Activities

The activities in a logic model are the processes which the program undertakes to accomplish the goal. Details of study activities are summarized in Table 15. All participants will be encouraged to engage in all activities associated with the *Power of Coaching* class as well as the Goal Development exercise. To fulfill the purpose of this study, participants are expected to institute and work towards established personal end goals as well as collaborate in the identification and progression of team goal attainment. Participants are encouraged to define

their goals after completing the *StrengthsFinder 2.0 Strengths Assessment* tool.<sup>23</sup> Completion of monthly online modules and active participation in all aspects of the in-person monthly peer coaching sessions, especially the dialog practicum is imperative. Reflective journaling following the coaching experience is also anticipated. Engaging in peer coaching dialog, such as peer coaching exercises to improve didactic educational performance, between the monthly sessions will enhance the experience.

### **Outputs**

Outputs in a logic model identify what is produced through the activities. Details of study outputs are summarized in Table 15. Peer coaching training will be provided to nine core faculty educators from the Mayo Nurse Anesthesia Graduate Education Program. One Goal Development lesson has been designed and the resulting one individual goal per participant and one team goal to follow. One Blackboard course was created to house and provide access to coaching tools, preparatory skillset modules, reflective journals, and pre-and post-assessment surveys. Six online modules and the associated in-person instruction on coaching skillsets have been developed. Three coaching triad groups have been organized. One monthly reflective journal script has been developed as well as one post-participation interview script.

### **Outcomes**

Also described as the impact, outcomes in a logic model are the changes and benefits that have resulted because of the program. Details of study outcomes are summarized in Table 15. The long term goal of this program is to increase medical educator effectiveness. One measure of effectiveness for the purpose of this study is to see participants understanding and utilizing the coaching principles described in this curriculum. Participants will utilize these

principles to obtain goal attainment. If the participant identified portions of his or her didactic education technique as an area needing improvement, it is the goal of this study that that participant will seek peer coaching techniques towards improvement of that skill. Group goal attainment will also be utilized to create collegiality among the team. Along with group goal attainment, this peer coaching curriculum aims to improve the seeking and deliverance of effective, non-judgmental feedback. Comfort with effective feedback will also contribute to collegiality and educator effectiveness. In addition, once skilled in proper feedback delivery, the faculty educators will be in a position to serve as strong role models for their students and other medical educator colleagues. Armed with peer coaching skills, feedback proficiency, personal and group goal attainment, and a heightened sense of collegiality, satisfaction in the role of the educator should be achieved. If all of the anticipated benefits emerge from this study, it is expected that the peer educators will choose to participate in peer coaching beyond the formal study period. New found expertise will serve as a catalyst for peer coaching implementation directed at students and colleague clinical educators. If proper implementation and modeling occurs from this medical educator faculty, perhaps students and clinical educators who have been exposed to the benefits themselves will want to learn and practice peer coaching skills themselves.

### ***Outcome Measures***

Outcome measures will be described in this section. Both quantitative and qualitative outcome measures will be summarized and linked to the pertinent hypotheses in which they aim to address in the table found at the conclusion of this section (Table 14).

## **Anonymous Demographics**

Participants will be asked to provide details on gender, years of experience as a practicing Certified Registered Nurse Anesthetist (CRNA), as well as years of experience as a formal medical educator (Appendix H) prior to the *Power of Coaching* course. Participants will be assigned a participant number in order to protect their identity and ensure confidentiality and data blinding. The participant number will be used to match all assessment tools to each individual for final analysis.

## **Pre- and Post- Intervention Surveys**

### **Coaching Skillset**

In an effort to measure the skills and qualities needed to be an effective coach, participants will be asked to complete the quantitative *Coaching Tools* assessment entitled “A Coach’s Self-Evaluation Checklist” (Appendix I) prior to the *Power of Coaching* course. Participants will be asked to repeat the assessment at the conclusion of the final coaching session again three months later. Participants will be assigned a participant number in order to protect their identity and ensure confidentiality and data blinding. The participant number will be used to match all assessment tools to each individual for final analysis.

The use of this tool could not be validated in the research literature. Review of the literature failed to provide another, more valid, alternative. Search strategies included analysis of all coaching literature used in the review of the literature and background segments of this manuscript, consultations of relevant articles within the reference sections of the above mentioned literature, as well as independent search strategies using key terms “coaching assessment, “appreciative coaching,” and “appreciative coaching assessment.”

### Collegiality

To assess the degree of collegiality among members of the participant team, the quantitative *Survey of Collegial Communication* was used (Appendix J).<sup>85</sup> The tool was a slightly modified version of the validated *Survey of Organizations* tool.<sup>86</sup> Taylor and Bowers established the reliability for the *Survey of Organizations* using the Cronbach alphas. Construct variables were validated when criterion variables correlated significantly with the indexes of the instrument.<sup>85</sup> The *Survey of Collegial Communication* was validated by a priori of independent doctorally prepared nursing faculty members.

The scale is based on Likert's ideal model of highly effective work groups. In order to create the *Survey of Collegial Communications* based on *Survey of Organizations*, items that did not relate to interpersonal communication were omitted. The final version of the *Survey of Collegial Communication* consists of 40 items. Participants are asked to relate each question to the following statements, "This is how it is now" and "This is how I'd like it to be." The first statement signifies the actual process and the second is a measure of desired process. The weighted satisfaction index is based on the assumption that satisfaction can be conceptualized by the discrepancy between the two, that being actual and desired. Subjects will be asked to respond to each question using the Likert scale of 1-5; 1= to a very little extent; 2= to a little extent; 3= to some extent; 4= to a great extent; 5= to a very great extent. Because the above processes have been previously verified by the *Survey of Organizations* and *Survey of Collegial Communication*, careful replication of such will be carried out for this study.

The subjects will be asked to complete the survey prior to the *Power of Coaching* course. Participants will be asked to repeat the assessment at the conclusion of the final coaching session

again three months later. Participants will be assigned a participant number in order to protect their identity and ensure confidentiality and data blinding. The participant number will be used to match all assessment tools to each individual for final analysis.

### **Job Satisfaction**

In order to assess the degree of educator job satisfaction, the *Job Satisfaction Survey (JSS)* will be used (Appendix K). Reliability has been verified using the Cronbach's alpha and Pearson correlation. The tool has been considered a multidimensional instrument useful for assessing jobs in general. Convergent validity and discriminant validity have also been assessed.

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JSS is a 36 item scale designed to assess employee attitudes about aspects of the job and the job itself. A summated rating scale is used. Participants will be asked to rate each item on a scale from 1-6; 1= strongly disagree; 6= strongly agree. Items fall under one of nine categories; (1) pay; (2) promotion; (3) supervision; (4) fringe benefits; (5) contingent rewards; (6) operating procedures; (7) coworkers; (8) nature of work; (9) communication. The interpretation of the score will use the absolute approach in which arbitrary cut scores will represent either dissatisfaction or satisfaction. Omission of items will not affect the scoring of the tool. Because the interventions of this study cannot affect monetary compensation or benefits, items representing those facets were omitted. 21 items will be included in the final survey (Appendix K). The subjects will be asked to complete the survey prior to the *Power of Coaching* course. Participants will be asked to repeat the assessment at the conclusion of the final coaching session again three months later. Participants will be assigned a participant number in order to protect

their identity and ensure confidentiality and data blinding. The participant number will be used to match all assessment tools to each individual for final analysis.

### **Confidence**

In order to assess the degree of educator confidence, the *Confidence Scale* will be used (Appendix L). Internal consistency, test-retest reliability, and the construct validity have been determined.<sup>88</sup> The tool consists of five statements, using a Likert scale to assess degree of confidence; 1= low confidence or uncertainty; 5= high confidence or absolute certainty. The interpretation of the score will use the absolute approach in which arbitrary cut scores will represent either low or high confidence. The subjects will be asked to complete the survey prior to the *Power of Coaching* course. Participants will be asked to repeat the assessment at the conclusion of the final coaching session and again three months later. Participants will be assigned a participant number in order to protect their identity and ensure confidentiality and data blinding. The participant number will be used to match all assessment tools to each individual for final analysis.

### **Reflective Journaling**

Following each monthly face-to-face coaching sessions, participants will be expected to utilize the reflective journal exercise provided by the Black Board course. This will total six entries. Participants will be assigned a participant number in order to protect their identity and ensure confidentiality and data blinding. The participant number will be used to match all assessment tools to each individual for final analysis.

The exercise will encourage the participant to reflect on the coaching experience and acknowledge the progression of his or her defined personal end goal as well as the group goal.

The journal exercise will include a Likert scale associated the progression of goals to provide a visual measure of goal progress and attainment (Appendix M).

**Post-Participation Interview**

At the conclusion of the study, cooperation in the post-participation interview will be imperative to gather the necessary qualitative data. Process evaluation will also be gathered through this assessment piece. Interviews will be conducted by the author and Carrie Bowler. See Appendix N for interview details. Participants will be assigned a participant number in order to protect their identity and ensure confidentiality and data blinding. The participant number will be used to match all assessment tools to each individual for final analysis.



Table 14: Summary of Outcome Measures

| Outcome Measures   |  |                          |  |                     |
|--|--|--------------------------|--|---------------------|
| Outcome  | Assessment Tool                          | Qualitative/Quantitative | Timing   | Hypothesis #        |
| <b>Coaching skillset</b>   | <i>Coaching Tools assessment</i>         | Quantitative             | Pre and Post study, 3 months after conclusion of study | 6                   |
| <b>Collegiality</b>  | <i>Survey of Collegial Communication</i> | Quantitative             | Pre and Post study, 3 months after conclusion of study | 2                   |
| <b>Educator Job Satisfaction</b>   | <i>Job Satisfaction Survey (JSS)</i>     | Quantitative             | Pre and Post study, 3 months after conclusion of study | 4                   |
| <b>Educator Confidence</b>   | <i>The Confidence Scale</i>              | Quantitative             | Pre and Post study, 3 months after conclusion of study | 3                   |
| <b>Educator Effectiveness<br/>Coaching Skillset<br/>Collegiality<br/>Educator Job Satisfaction<br/>Educator Confidence</b>                           | Reflective Journaling                    | Qualitative              | Post monthly coaching sessions                         | 1, 2, 3, 4, 5, 6, 7 |
| <b>Educator Effectiveness<br/>Coaching Skillset<br/>Collegiality<br/>Educator Job Satisfaction<br/>Educator Confidence</b>                           | Coaching Practicum Observation           | Qualitative              | During monthly coaching sessions                       | 1, 2, 3, 4, 6, 7    |
| <b>Program Effectiveness<br/>Educator Effectiveness<br/>Coaching Skillset<br/>Collegiality<br/>Educator Job Satisfaction<br/>Educator Confidence</b> | Post-Participation Interview             | Qualitative              | Post study   | 1, 2, 3, 4, 5, 6, 7 |

## Timeline

Table 17: Timeline

|                        |  |
|------------------------|--|
| June 2015 – March 2016 | Curriculum and assessment development, IRB approval  |
| February, 2016         | Meeting to introduce the study<br>Obtain oral consent for willing participants<br>Disburse text books<br>Disburse pre-study assessment tool                                  |
| March, 2016            | Power of Coaching course<br>Goal Development training<br>Individual and group goal development   |
| April, 2016            | Peer coaching on-line module: Mindset<br>Peer coaching journal: Mindset<br>Peer coaching in-person didactic session: Mindset<br>Peer coaching practicum                      |
| May, 2016              | Peer coaching on-line module: Relationships<br>Peer coaching journal: Relationships<br>Peer coaching in-person didactic session: Relationships<br>Peer coaching practicum    |
| June, 2016             | Peer coaching on-line module: Listening<br>Peer coaching journal: Listening<br>Peer coaching in-person didactic session: Listening<br>Peer coaching practicum                |
| August, 2016           | Peer coaching on-line module: Feedback<br>Peer coaching journal: Feedback<br>Peer coaching in-person didactic session: Feedback<br>Peer coaching practicum                   |
| September, 2016        | Peer coaching on-line module: Accountability<br>Peer coaching journal: Accountability<br>Peer coaching in-person didactic session: Accountability<br>Peer coaching practicum |

|                         |  |
|-------------------------|--|
| October, 2016           | Peer coaching on-line module: Powerful Questions<br>Peer coaching journal: Powerful Questions<br>Peer coaching in-person didactic session: Powerful Questions<br>Peer coaching practicum |
| October, 2016           | Post-study interview   |
| October 2016-March 2017 | Data analysis and writing of findings and implications   |

### **Data Analysis**

Pre-and post-assessments of coaching skills, collegiality, educator job satisfaction, and educator confidence were scored according to published guidelines.<sup>85, 86, 87, 88</sup> Resulting scale scores from pre- and post-implementation were compared using the Wilcoxon signed rank test. In all cases, two-tailed  $p < 0.05$  was considered statistically significant. Refer to the Summary of Hypotheses (Table 14) for acknowledgments of appropriate hypotheses related to these assessments.

Participants completed monthly reflective journal entries. Journal prompts looked at (1) the peer coaching experience, (2) the experience of being a peer coach, and (3) the experience of receiving peer coaching. Theme analysis using the NVivo software was applied. Reflective journal goal progress Likert scales were assessed to determine goal progression of both the individual and team goals.

Finally, individual participant interviews were conducted after study conclusion. Interviews were conducted by the author and Carrie Bowler using an interview guide (Appendix N), digitally recorded and field notes completed using Livescribe tools. Study data was compiled and analyzed as outlined from the phenomenological research approach independently by both the author and Carrie Bowler. Qualitative data was coded for themes. Theme categorization and

data checking was independently performed by the author and Carrie Bowler. Throughout this process, the researchers looked for relationships between the data obtained and outcomes identified in the literature. Content that did not fit in the initial categories were classified as additional classifications.

Theme analysis for all qualitative portions of this study (interview, reflective journal entries, and observational notes) looked for the peer coaching curriculum's influences on participants' coaching skillset, collegiality, educator job satisfaction, educator confidence, and educator effectiveness.

## **Results**

The following section will describe results discovered from both the quantitative and quantitative assessments. Specifically, the results will be linked to the original hypotheses focusing on collegiality, confidence, job satisfaction, goal attainment and coaching skill. In addition, additional themes gathered from qualitative analysis will be described.

The survey completion rate was 100% (n=9). Findings from qualitative and quantitative data have been integrated in the presentation of results with qualitative details described first.

Table 18: Characteristics of Participants (n=9)

| Characteristics   |              | n   | %  |
|---|--------------|-----|----|
| Gender Male/Female  |              | 3/9 | 33 |
| Years in clinical practice as a Certified Registered Nurse Anesthetist (CRNA) |              |     | 0  |
|   | <1 year      | 0/9 | 0  |
|   | 1 - 3 years  | 1/9 | 11 |
|   | 4 – 6 years  | 3/9 | 33 |
|   | 7 – 10 years | 4/9 | 44 |
|   | <11 years    | 1/9 | 11 |
| Years in a formal medical education role                                      |              |     |    |
|   | <1 year      | 1/9 | 11 |
|   | 1 - 3 years  | 7/9 | 78 |
|   | 4 – 6 years  | 1/9 | 11 |
|   | 7 – 10 years | 0/9 | 0  |
|   | <11 years    | 0/9 | 0  |

### Collegiality

After qualitative analysis, all participants expressed some degree of improvement in faculty collegiality directly related to this program. In addition, 56% of the participants mentioned an improved relationship with their students after participating. Participants admitted that being vulnerable became easier as the program went on. Interviews revealed that the program served a deliberate means to get together which served more meaning than being present at a faculty meeting. Direct quotes supporting the program's impact on collegiality are as follows:

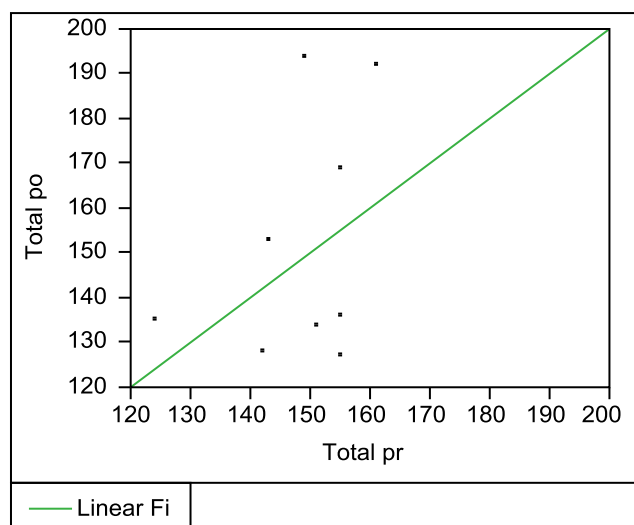
- “It has helped a lot, it has been great. I hope we can continue something like this. It brought us together physically, but emotionally brought us together too. It evoked trust in each other. It has made us a stronger group.”
- “It provided a way to get to know each other” and “let our guard down.”
- ”Common goal gave us a way to come together.”
- “enhanced collegiality”
- “perhaps it feels like we are more comfortable approaching each other”
- “More willing to listen to others’ opinions and bring issues to the table.”

- “I felt like I was cared for by these individuals. When they followed up with me it felt nice.”
- “Forced me to open up and learn the benefit from working with someone else.”
- “Anyone of these people I could go to now and they would not second my intentions or not give me their time and I feel the same.”
- “improved our ability to work together”
- “I can approach people more easily than I could before.”

Table 19: Collegiality Survey Results

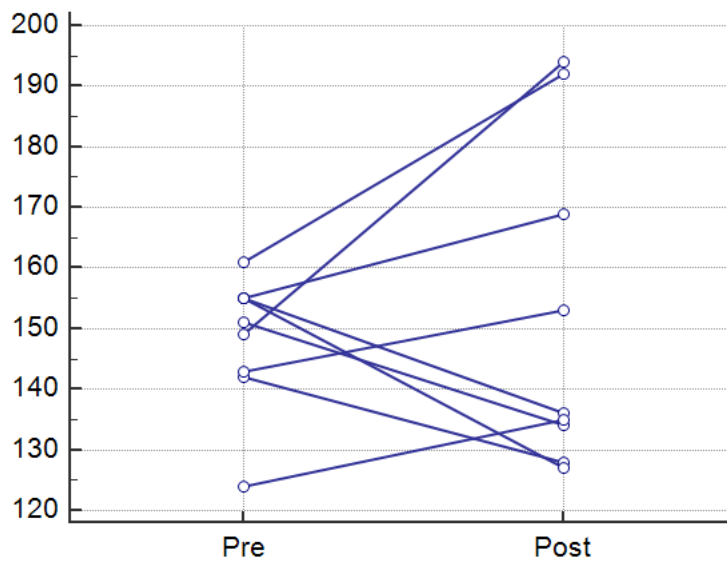
| Collegiality                                      |            |      |             |      |                           |      |             |
|---|------------|------|-------------|------|---------------------------|------|-------------|
| Components  | Actual Pre |      | Actual Post |      | Difference Post minus Pre |      | WRS P-value |
|   | Mean       | S.D. | Mean        | S.D. | Mean                      | S.D. |             |
| Confidence and Trust                              | 19.0       | 1.8  | 19.4        | 3.8  | 0.4                       | 3.9  | 1.0         |
| Team Efforts Towards Goal Achievement             | 19.2       | 2.4  | 19.1        | 3.9  | -0.1                      | 5.0  | 1.0         |
| Open Communication                                | 16.4       | 1.6  | 16.6        | 4.5  | 0.1                       | 3.7  | 1.0         |
| Mutual Help                                       | 19.1       | 1.8  | 19.1        | 2.3  | 0                         | 2.3  | 0.8         |
| Mutual Support                                    | 18.0       | 1.9  | 19.1        | 3.4  | 1.1                       | 4.4  | 0.6         |
| Creativity  | 18.6       | 1.7  | 19.4        | 3.9  | 0.9                       | 2.8  | 0.4         |
| Freedom from Threat<br>Friendliness and Enjoyment | 17.6       | 3.1  | 18.4        | 3.9  | 0.9                       | 2.8  | 0.5         |
| Sum   | 148.3      | 11.0 | 152.0       | 26.8 | 3.7                       | 24.8 | 0.93        |

Figure 14: Collegiality Diagonal Reference Line Plot



The green diagonal line represents NO CHANGE. Dots appearing above the line represent positive change (improvement) from the pre-intervention time frame to the post-intervention time frame.

Figure 15: Collegiality Paired Dot Plot



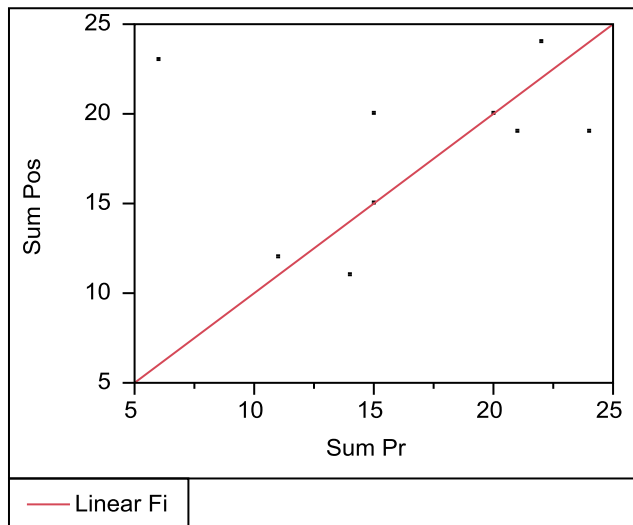
### Confidence

100% of the participants indicated an increase in their confidence and self-efficacy through interview and reflective journal analysis. This increase was related to either their role as a formal educator, confidence in the coaching role, confidence dealing with students, and/or confidence initiating and participating in difficult conversations. Participants acknowledged the newfound “tools” learned as having a direct influence on this confidence level. One participant stated, this has “made me more comfortable talking to people with concerns. This is big.”

Table 20: Confidence Survey Results

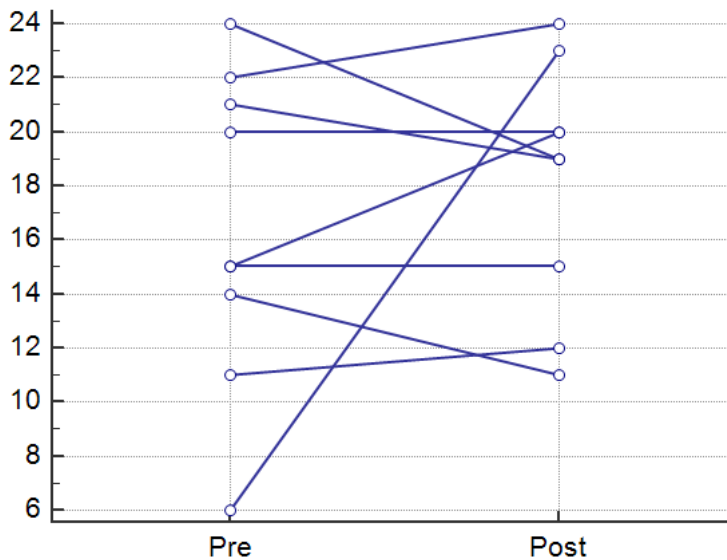
| Confidence |      |      |      |                       |      |             |
|------------|------|------|------|-----------------------|------|-------------|
| Pre        |      | Post |      | Difference (post-pre) |      | WRS P-value |
| Mean       | S.D. | Mean | S.D. | Mean                  | S.D. |             |
| 16.4       | 5.8  | 18.1 | 4.5  | 1.7                   | 6.4  | 0.80        |

Figure 16: Confidence Diagonal Reference Line Plot



The red diagonal line represents NO CHANGE. Dots appearing above the line represent positive change (improvement) from the pre-intervention time frame to the post-intervention time frame.

Figure 17: Confidence Paired Dot Plot





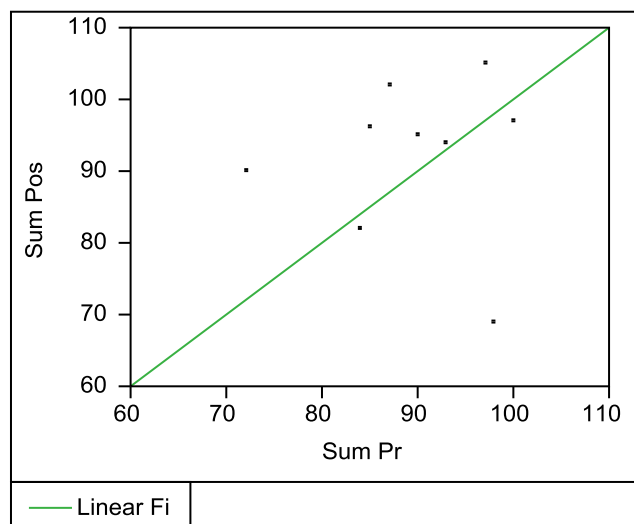
## Job Satisfaction

After qualitative analysis, 56% of the participants acknowledged a change in their personal job satisfaction after participating in this program. One participant attributed this to the awareness of a fixed mindset in relation to faculty roles.

Table 21: Job Satisfaction Survey Results

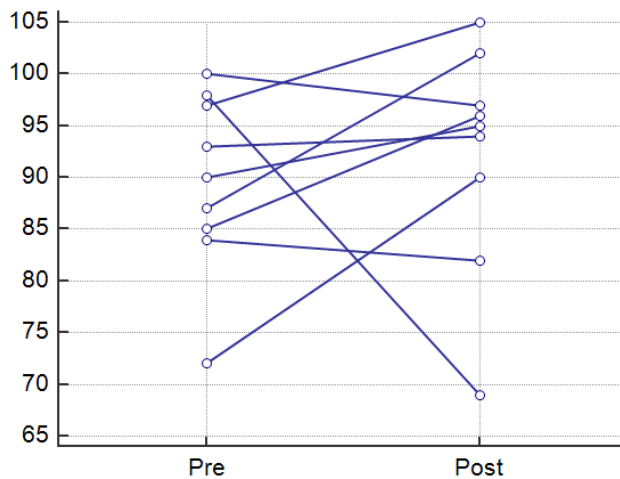
| Job Satisfaction |      |      |      |                             |      |                |
|------------------|------|------|------|-----------------------------|------|----------------|
| Pre              |      | Post |      | Difference (post minus pre) |      |                |
| Mean             | S.D. | Mean | S.D. | Mean                        | S.D. | WRS<br>P-value |
| 89.6             | 8.8  | 92.2 | 10.9 | 2.7                         | 13.9 | 0.36           |

Figure 18: Satisfaction Diagonal Reference Line Plot



The green diagonal line represents NO CHANGE. Dots appearing above the line represent positive change (improvement) from the pre-intervention time frame to the post-intervention time frame.

Figure 19: Satisfaction Paired Dot Plot



### Goal Attainment

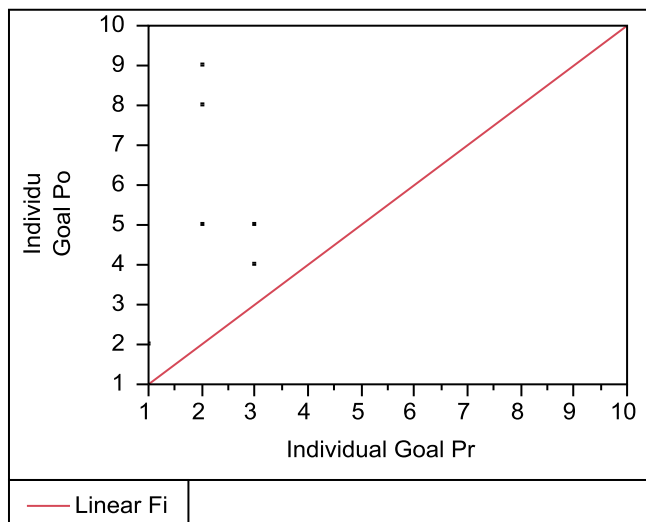
89% of participants admitted to achieving clarity and work towards performance goals after interview and reflective journal analysis. In addition, 89% of participants attributed the increase in productivity to involvement in this peer coaching program. Four out of the nine participants described this increase in productivity as relating to group productivity resulting from group goal attainment. Accountability produced within this program contributed to goal attainment.

Much was also learned about the importance of picking a good, deliberate goal. The participants that expressed the most difficulty attaining their goals admittedly did not follow the S.M.A.R.T. goal guidelines when picking their personal goal. Participants also mentioned that the option of choosing a person goal as their individual goal may have led to a more meaningful application of these skills.

Table 22: Goal Attainment Results

| Goal Accomplishment |      |      |      |      |                          |      |             |
|---------------------|------|------|------|------|--------------------------|------|-------------|
| Individual Goal     | Pre  |      | Post |      | Difference<br>(pre-post) |      | WRS P-value |
|                     | Mean | S.D. | Mean | S.D. | Mean                     | S.D. |             |
|                     | 2.1  | 0.6  | 5.4  | 2.2  | 3.3                      | 2.2  |             |
| Group Goal          | Pre  |      | Post |      | Difference               |      | WRS P-value |
|                     | Mean | S.D. | Mean | S.D. | Mean                     | S.D. |             |
|                     | 1.7  | 1.3  | 6.3  | 1.7  | 4.7                      | 1.7  |             |

Figure 20: Individual Goal Diagonal Reference Line Plot



The red diagonal line represents NO CHANGE. Dots appearing above the line represent positive change (improvement) from the pre-intervention time frame to the post-intervention time frame.

Note: samples denoting the same value will appear as one single dot.

Figure 21: Individual Goal Paired Dot Plot

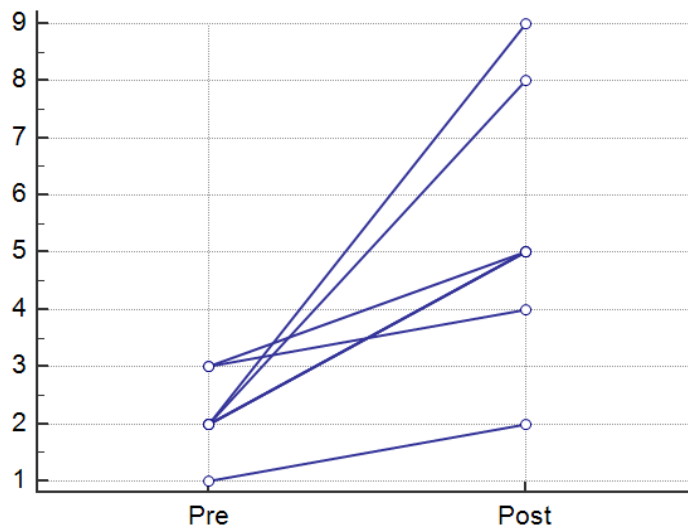
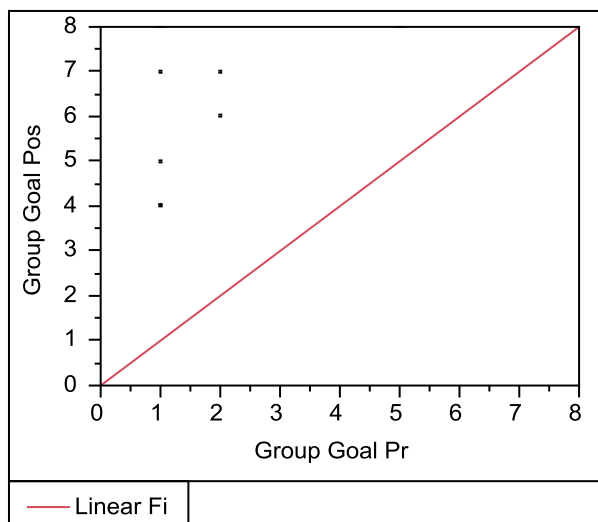


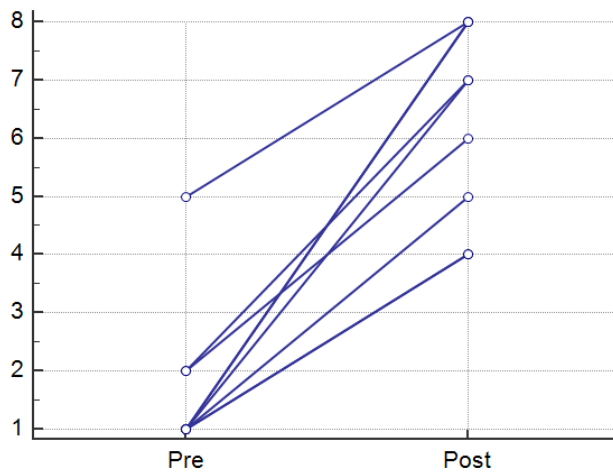
Figure 22: Group Goal Diagonal Reference Line Plot



The red diagonal line represents NO CHANGE. Dots appearing above the line represent positive change (improvement) from the pre-intervention time frame to the post-intervention time frame.

Note: samples denoting the same value will appear as one single dot.

Figure 23: Group Goal Paired Dot Plot



### Coaching Skillset (Being the Coach)

Theme analysis around the role of being the coach acknowledged that this is indeed a new concept and skill for each of the participants and one they found difficult to execute at first. By the conclusion of the formal program, 100% of the participants felt as though they had grown in their coaching abilities and comfort with the process. 100% of the participants also shared that they now understand coaching is intended to guide the coachee to a solution rather than to simply give advice or support. Because this was a new approach, they acknowledged that this requires deliberate practice and that it is a skill that can eventually be attained.

Confidence notably grew over the duration of the program. Many of the participants attributed this change to deliberate practice, the realization that they are not required to be the expert but to guide, acquisition of newfound communication tools, and watching their peers grow in the skill alongside them. Participants acknowledged emotions of “anxiety”, “uncertainty”, “uncomfortableness”, “frustration”, “fear of failure”, “apprehension”, “challenging”, “awkwardness”, and “skeptical” at first but all participants acknowledged a dissipation of those

feelings and a replacement with such emotions as “victory”, “rejuvenation”, “happy”, “fulfilled,” “gratifying”, and “awesome.” A defining milestone was shared by many as the moment when the written coaching tool was no longer necessary and the coaching process became a natural act of communication.

Participants described their experiences as well as shared their intent to use these skills when coaching each other, their students, their family members, and even their supervisor. They described how useful this skill can be both personally and professionally. Participants described an increased likelihood to coach others than to seek coaching for themselves. A few descriptive quotes related to being in the coaching role are as follows:

- “Tools in my belt now” “new techniques to help each other more forward.”
- “Fun to see the light bulb go on for other people.”
- “See more of a sense of ownership in others”

#### **Coaching Skillset (Being Coached)**

Participants acknowledged how much vulnerability is required while in the role of the coachee. A number of the women participants shared how much easier it was to be vulnerable while being coached on professional issues as opposed to personal ones. All subjects did however acknowledge how much easier it was to be coached and to be vulnerable with someone in which a relationship was present. How impactful and productive the session was could be correlated to the expertise of the coach as described by the participants.

Given the opportunity to be coached also gave the participants insight into asking powerful questions and active listening skills. Being coached also allowed for the gain of new perspectives to a problem and allowed for more personal accountability when being coached. One participant shared, “I can’t rely on others fixing my problem for me, that is not as

meaningful.” Many of the participants admitted to using powerful questions within their own inner dialogue to answer questions and find solutions for themselves as a product of this program.

100% of the participants admitted to achieving new skills (mindset, feedback, active listening and inquiry, coaching skills in general) as a result of the coaching program. 100% of the participants admitted to applying these new skills and abilities within the study timeframe as a result of the program.

Table 23: Coaching Skills Survey Results

| Coaching Skill |      |      |      |                             |      |                |
|----------------|------|------|------|-----------------------------|------|----------------|
| Pre            |      | Post |      | Difference (post minus pre) |      | WRS<br>P Value |
| Mean           | S.D. | Mean | S.D. | Mean                        | S.D. |                |
| 15.7           | 3.8  | 18.9 | 2.9  | 3.2                         | 3.8  | 0.02           |

Figure 24: Coaching Skills Diagonal Reference Line Plot

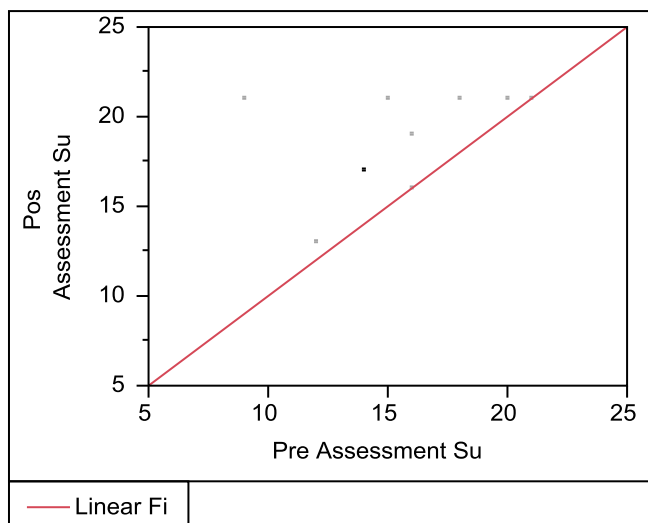
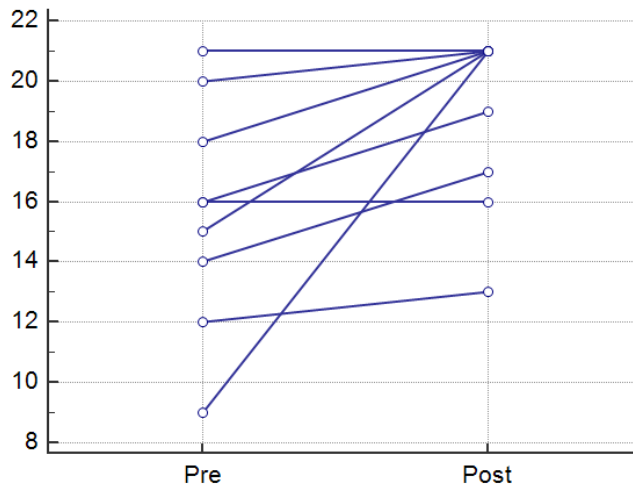


Figure 25: Coaching Skill Paired Dot Plot



Additional themes emerged from analysis of the reflective journal entries and post-intervention interviews. These will be described below.

### Communication

100% of the participants described improvement in communication as a result of this program. Described as “communication tools”, the development of the skillsets introduced in this program led to greater use of active listening and powerful questions. As one participant stated, this has really “opened my eyes to opening up that conversation and to really be attentive.” Participants described a new found comfort with initiating difficult conversations. The following phrases display examples of how the skillsets have attributed to improved communication, “common terminology used in this program will help people broach subjects that might have been touchy before, especially the accountability piece. It is “common language now, not taboo.”



**Reflection and Self-Awareness**

78% of the participants described a greater application of reflection and self-awareness as a result of this program. In addition, journal entries displayed a deeper level of reflection, self-awareness, and articulation as the program went on. Many of the participants described a greater awareness and new control over their mindset (fixed versus open). One participant stated, “This process made me self-reflect and have a better mindset.” In addition, attitudes related to asking for and accepting help was changed. Coaching through the group goal allowed for a greater awareness of the status of the team’s communication and goal. Lastly, reflection allowed participants to link these skills to interactions with students. One participant shared, “When reflecting on previous interactions with students, I would have done things differently using the skills learned in this program.” Some participants did not always appreciate the value of the monthly reflective journal exercises.

**Accountability and Overcoming Obstacles**

89% of the participants strongly described a new found appreciation of the importance of accountability and could directly relate it to goal attainment and improvements in productivity. 78% of participants described how this program helped them overcome obstacles.

**Coaching Program**

Several themes emerged related to the coaching program itself. 100% of the participants expressed interest in extending this program beyond the study time frame. In addition 100% of them would participate if asked to do it over again and would recommend the program to others. Many attributed the success to the acquisition of useful “tools” that can be applied to both their

professional and personal aspects of life. As one participant summarized, “It will affect the rest of my life so thank you.”

Although 100% of the participants stated that the time required was “just right” or “doable,” busy professional lives may have influenced some of their devotion to the program. Those that did mention busyness acknowledged that program was “worth the time it took for what was gained.”

The most common barrier to initial buy-in was their self-described skeptical mindset. Not particularly interested in therapeutic communication or “fluffy” subjects, 100% of the skeptical nurse anesthetist participants later shared that their fixed mindset related to coaching at first turned into recognition of the usefulness of coaching and its associated skillsets. Those that admitted to having a fixed mindset at the start of the program would have still voluntarily participated if the rest of the group chose to participate to remain part of the group. In addition, 100% of them would recommend the program to others.

In addition to a fixed mindset, lack of confidence in one’s ability to coach served as an initial barrier. 100% of the participants that shared this barrier stated that the confidence gained quickly dissipated their fear of failure related to coaching.

A few logistical barriers were discovered. Participants acknowledged the difficulty ensuring everyone’s schedule supported participation. In addition, the faculty meeting held prior to the peer coaching sessions often led to late attendance. Tardiness made it difficult to accomplish the program in its entirety within the remainder of the hour. This was especially important as participants felt that getting to the stage of accountability within the coaching sessions led to greater satisfaction. This stage may not have been accomplished if time was short.

Participants very much enjoyed the initial *Power of Coaching* class and saw it as a wonderful introduction to the concept. Statements related to the *Power of Coaching* class include, “my aha moment,” “wow this is important stuff,” and “engaging and fun.”

Participants also enjoyed the online modules related to the coaching skillsets. They were described as concise and impactful. The modules were said to be easy to access and reinforced the skillset discussed at the face-to-face sessions to solidify the content.

When asked about the face-to-face sessions, the participants acknowledged the importance of deliberate practice of these skills. Participants appreciated the experience to grow as the coach and coachee (or talent) at the same time. Most participants were happy with the frequency and time required but some acknowledged that more frequent sessions could be beneficial. Although an invitation was extended for participants to engage in additional coaching practice through the Mayo Clinic *Coaching Connections* program, no one took advantage of this additional practice during the study period.

Much discussion related to the face-to-face sessions gravitated toward the whipped coaching technique utilized during the group goal practice. Participants shared that the whipped coaching exercises were more impactful when compared to the triads because they were able to learn from the powerful questions posed by others. In addition, they gained more awareness of the perspective of others using this medium. Seeing others grow in the whipped coaching process helped confidence and understanding. They described whipped coaching as “fun”, “productive”, “engaging”, and “more valuable.” In addition, the whipped coaching did not lead to greater feelings of required vulnerability.

## **DISCUSSION**

A summary of findings, interpretation of results, a comparison to prior research and limitations will be included in this section. Finally, the successes and challenges will be described followed by implications for the future practice and recommendations for future research.

### **Summary of Findings**

All participants expressed some degree of improvement in faculty collegiality directly related to this program. In addition, 56% of the participants mentioned an improved relationship with their students after participating. 100% of the participants indicated an increase in their confidence and self-efficacy. This increase was related to either their role as a formal educator, confidence in the coaching role, confidence dealing with students, and/or confidence initiating and participating in difficult conversations. 56% of the participants acknowledged a change in their personal job satisfaction related to this program. 89% of participants admitted to achieving clarity and work towards performance goals. 100% of the participants felt as though they had grown in their coaching abilities and comfort with the process. 100% of the participants admitted to achieving new skills (mindset, feedback, active listening and inquiry, coaching skills in general) as a result of the coaching program. 100% of the participants admitted to applying these new skills and abilities within the study timeframe as a result of the program. 100% of the participants described improvement in communication as a result of this program. 89% of the participants strongly described a new found appreciation of the importance of accountability and could directly relate it to goal attainment and improvements in productivity. 78% of participants described how this program helped them overcome obstacles. Several themes emerged related to

the coaching program itself. 100% of the participants expressed interest in extending this program beyond the study time frame. In addition 100% of them would participate if asked to do it over again and would recommend the program to others. Refer to Table 24 for a summary of qualitative findings as they compare to hypotheses.

Table 24: Qualitative Evidence to Support Hypotheses

| Hypotheses   |  | Qualitative Supporting Evidence |     |
|--|--|---------------------------------|-----|
|  |  | n                               | %   |
| At the conclusion of the study, participants will: | <ul style="list-style-type: none"> <li>• be more effective educators</li> </ul>  | 9/9                             | 100 |
|  | <ul style="list-style-type: none"> <li>• engage in a more collegial relationship with each member of the team</li> </ul>   | 9/9                             | 100 |
|  | <ul style="list-style-type: none"> <li>• admit to greater confidence in his or her role as an educator</li> </ul>  | 9/9                             | 100 |
|  | <ul style="list-style-type: none"> <li>• perceive greater educator job satisfaction</li> </ul>   | 5/9                             | 56  |
|  | <ul style="list-style-type: none"> <li>• improve the likelihood of personal and team goal identification and attainment</li> </ul>   | 9/9                             | 100 |
|  | <ul style="list-style-type: none"> <li>• have developed his or her knowledge and use of coaching skills</li> </ul>   | 9/9                             | 100 |
|  | <ul style="list-style-type: none"> <li>• engage in coaching behavior towards each other, their students, and fellow clinical educators beyond the study timeframe</li> </ul> | 8/9                             | 89  |

## Interpretation of Results

While participation by all nine core CRNA faculty members was voluntary, involvement was highly suggested and supported by the program director. The fact that participation was strongly suggested and encouraged limited this population from participating from a truly voluntary standpoint. This method of participation allowed for initial skeptical feelings on the usefulness and value of the program by some. Taking that into consideration, the researcher finds

it remarkable that all participants felt that the curriculum was indeed useful and valuable. In addition, even those with a fixed mindset at the start of the program would encourage others to participate, wanted an extension of the program, and would participate again if they had to do it over again.

The *Power of Coaching* course was instrumental in providing a fun and engaging way to introduce the participants to the topic of coaching. All of the participants were able to verbalize what coaching is and how it differs from their initial thoughts as well as how they can use it to interact with others. The introduction of the coaching skillsets (mindset, relationship, powerful questions, feedback, and accountability) within the modules and at the beginning of each face-to-face session solidified the concepts learned at the *Power of Coaching* course and allowed for an integration and application into their professional and personal interactions with others.

Participants were very appreciative of these useful “tools.”

The participants who did not follow the S.M.A.R.T. guide to goal development struggled with their personal goals throughout the program. That being said, 100% of the participants did show improvement in the progression of their personal goal. The goal exercise forced participants to become more aware of something needing improvement. This awareness coupled with the accountability with their coaching partners likely attributed to this progression. In addition, reflecting on and writing about the individual goals within the reflective journal entries may have assisted. It was relatively easy for the team to decide on the group goal of improving communication within the team. Because of the size of this goal, Carrie Bowler’s coaching expertise was necessary to assist the team in narrowing the goal down and work towards progression. More progress and satisfaction was experienced with the group goal than with the individual goals.

Coaching through the group goal enlisted the whipped coaching process, different from the triads utilized in the personal goal coaching exercises. Because Carrie utilized the whipped coaching technique, members of the group were able to learn the coaching skills with one another at the guidance of an expert. This model enlisted the two areas most important to the participants in the coaching process (as discovered during the reflective journal entries and post-participation interview analysis): being coached by someone with whom a relationship is present and being coached by an expert available to add additional coaching perspectives, feedback and overall value to the session.

Evidence supporting the improvement of faculty job satisfaction was not as strong in this study following exposure to the peer coaching curriculum. Some participants identified that the supervisor's absence in this curriculum may be a contributing factor. The presence of the supervisor may have allowed more insight and awareness into the current state. In addition, the supervisor holds the influence to control the changes necessary to affect the current level of satisfaction. The supervisor was purposefully not included in this study in an effort flatten hierarchy and to encourage faculty vulnerability as supported by previous evidence.<sup>8, 30, 31, 40</sup>

Qualitative analysis of the blinded monthly reflective journals and post-intervention interviews indicated a strong improvement in overall team collegiality. The quantitative survey results were contradictory. This may be explained by a number of things. First of all, the strength of the surveys were limited by the number of participants (n=9). In addition, in an attempt to use only surveys previously validated in the literature using the Cronbach's Alpha tool may have impacted the ability to truly inquire about outcomes specific to this group and this study. Lastly, the awareness of team issues may have contributed to the perception of collegiality experienced at the conclusion of the study timeframe. Participants may have been made more aware of

differences in communication for example as a result of the program exercises which could influence their perception as captured by this survey tool.

### **Comparison to Prior Research**

Satisfaction of the faculty development tool was high, consistent with the results articulated by Steinert.<sup>2</sup> In addition, communication and the use of effective feedback were also consistent with Steinert's results<sup>2</sup> as were the positive behavioral changes. Satisfaction with the role as a faculty member was, however, not as positive.

The results of this study were consistent with the benefits to coaching described by Whitmore as follows:<sup>15</sup> (1) examine an individual's self-awareness of and strategies to employ strengths; (2) help with overcoming obstacles; (3) assists one to reach their full potential (not necessarily just performance) through continuous learning; (4) achieve new skills and competencies to become more effective; (5) clarify and work towards performance goals; (6) improve relationships.

Qualitative analysis of this curriculum also indicated these positive outcomes as first described by Parker: (1) success in dealing with change; (2) support for personal and professional goals; (3) increased confidence; (4) improved accuracy on self-image; (5) development of soft skills; (6) fostering empowerment; (7) improved delivery of feedback.<sup>36</sup>

Participants of this study showed evidence of improvements in all of the following as first described by Schwellnus: (1) an effective means for collegial staff development; (2) increased self-awareness of clinical teaching behaviors; (3) improvements in collaborative relationship between colleagues; (4) increased levels of reflective thinking; (5) increased understanding and use of new skills; (6) improved transfer of knowledge and skills from the classroom to the



clinical setting: (7) increased productivity; (8) gains in accountability practices.<sup>40</sup> Evidence is however lacking to attribute gains in the following: (1) improved specific teaching skills; (2) decreased sense of anxiety.<sup>40</sup>

## Successes and Challenges

The launch of this program proved successful by several measures. Much support was given by organizational as well as departmental leadership. Participants remained eager and willing to participate in all elements of the curriculum.

Organization and communication were essential for successful implementation of this project. All information related to this curriculum (modules, reflective journals, participant enrollment details, coaching tools) was housed in a blackboard course in which all participants were enrolled as students. Faculty participants were acquainted with the blackboard format, aiding in the ease of use.

Figure 26: Blackboard Course

**HOME**

**Welcome to Peer Coaching for Medical Educators**

This course is designed to provide foundational knowledge about essential peer coaching facets. Each module will review a peer coaching concept and will be further explored during face to face sessions.

<http://montana.edu/coaching/orionides.williams.com/files/coachwilde.jpg/232246550/3/16157/coachwilde.jpg>

**Course Expectations:**

As a participant in the Peer Coaching Study, please:

1. Complete each module
2. Participate in the Face to Face Coaching Sessions
3. Complete monthly reflective journal entries

**Course Goal:**

Examine the experiences of a peer coaching faculty development program on medical educator utilization of coaching skills, confidence, satisfaction, and collegiality.

An email notification was sent one week prior to each face-to-face session to remind participants of the upcoming session and provided encouragement to complete the preparatory online skillset module. A follow-up email was sent at the conclusion of each face-to-face session thanking the participants for their involvement, acknowledging impactful content and/or discussion as well as reminding the participants of the reflective journal exercise.

The program did however encounter several challenges. Scheduling face-to-face sessions in which all participants were present presented a major barrier to participation. Because faculty participants held clinical responsibilities in addition to their educational duties, careful planning was required to allow for face-to-face participation. Sessions occurring during the summer months were especially difficult to ensure total participation of all subjects. To overcome this obstacle, face-to-face sessions were unanimously agreed upon and determined months in advance to allow for proper planning and were held on the same day and same time each month. In addition, meals were provided to facilitate faculty member's time management. Accommodations were made to ensure all missed face-to-face sessions were made up prior to the next-month's session. This required creative and flexible scheduling strategies.

Stagnation of the group goal was discovered early in the first face-to-face coaching session by the expert coach, Carrie Bowler. As a result, a whipped coaching technique was instituted to assist the group through their goal. Differing from the original triad method of coaching in which one member serves as the coach, another as the coachee (or talent) and a third as the observer, the whipped coaching exercise allowed all members to coach one coachee volunteer. Participants took turns using powerful questions to uncover barriers identified by the coachee.

Figure 27: Whipped Coaching Technique



Progress was made once this technique was introduced. Participants verbalized a desire to continue utilizing the whipped coaching methodology.

One hour face-to-face sessions required the coaching curriculum to be conducted in an organized and timely manner to allow for coaching practice. Most months, some faculty members presented to the face-to-face sessions five to fifteen minutes late due to a meeting scheduled just prior to the session and the time it took to gather the provided meal. Cooperation was sought from the facilitator conducting the meetings prior to the face-to-face session with increasingly improved results. In addition, menus were sent to the participants the week prior to the face-to-face session to ensure provided food was served to them at the start of the face-to-face session. Discussion of the coaching skillset carried out at the beginning of each face-to-face

session was increasingly condensed to allow for more time devoted to the coaching practicum throughout the duration of the program.

Monthly exposure to the coaching curriculum may have been spaced too far apart. Exposure to and practice of the coaching concepts may have proven more impactful had the content been provided within a shorter timeframe. Due to the logistics of the scheduling required to accommodate for both faculty and clinical time, this however was not possible in this situation.

Organization and communication remained integral to ensuring participation in all reflective journal entries, as follow-up reminders were necessary in several incidents.

### **Limitations**

Among the limitations of this study is the small sample size. Because this study was limited to the convenience sample of nine faculty certified registered nurse anesthesia educators, limited inferences can be made using quantitative assessments. Another limitation is the lack of control group in which to compare. In addition, the researcher was unable to account for confounding variables. Greater analysis may have been accomplished expanding the study time frame as well.

### **Implications for Future Practice**

Although skepticism and a fixed mindset did not deter the participants from finding value in this program, fostering enthusiasm and a growth mindset at the start of a peer coaching curriculum may ease the process and increase the speed in which personal benefits can be achieved. Stating the potential benefits one may achieve and providing examples of who has

benefited from like programs may assist with initial buy-in. If one was to institute a similar curriculum, it is suggested that the program be designed around a group rather than individual participation to encourage voluntary participation as participants in this study admitted the increased likelihood of signing up for a program as such when other members of the team did the same.

An organized and thorough manner in which the coaching concept is introduced is fundamental to the degree in which the participants understand and appreciate the role of the coach. In addition, deliberate review of the associated skillsets aid in the acquisition of the accompanying skills necessary to perform coaching well. Exposure to the coaching skillsets prior to the face-to-face sessions as well as reviewing and applying these skillsets in person aid in solidification of the content.

If goal development and progression serves as a means to learn and practice coaching skills, careful goal selection is imperative. Efficient time must be taken to explain how to utilize S.M.A.R.T. goal techniques in order to pick goals that are specific, meaningful, action oriented, realistic, and timely. Poor goal planning may lead to unnecessary goal stagnation, frustration, and distraction.

Regular practice of both the role of the coach and coachee (talent) is necessary to fully appreciate the skill of coaching and to gain necessary perspectives. Compared to the triad coaching partnership, the whipped coaching technique can offer participants a means in which they take part in a coaching exercise with their peers, those in which a relationship has been formed and vulnerability allowed. In addition, it permits the guidance of a coaching expert to offer feedback and insight into the coaching process, making the activity more meaningful.

Monthly, one-hour face-to-face coaching sessions may be an effective means to develop these skills. One may also consider offering a voluntary session every two weeks (30 minutes in length) for those interested in more frequent practice.

### **Recommendations for Future Research**

It is imperative to acknowledge the impact of having only nine nurse anesthesia faculty participants in this study and the need to consider a larger sample size for future research. Additional perspectives gained from this study allow for the following recommendations as additional values to be learned and populations to apply. Examples of such are described below.

Qualitative analysis of this study indicates the potential benefit coaching interactions may have on students. Students receiving coaching may be more likely to meet goals, gain more personal accountability for their problems and come up with their own solutions. Teachers and clinical preceptors/educators may be able to *guide* the students rather than tell or offer advice. This in turn may lead to higher level thinking for the learner.

Preceptors or clinical medical educators may also benefit from the instruction of the coaching process and associated skillsets. Armed with additional training in mindset, relationships, active listening, feedback, powerful questions, and accountability, clinical educators may be more likely to give higher quality, useful feedback. They may also experience a greater comfort in participating in difficult conversations.

Like medical educators, many medical professionals in leadership positions lack the formal training necessary to reach his or her leadership potential; therefore, medical leaders may also benefit from the introduction of a formalized coaching curriculum. Armed with the knowledge related to the coaching process and associated skillsets, medical leaders may be better

equipped to influence those they lead. Involvement in such a curriculum may prove beneficial in the collegiality of the leadership team. In addition, participation may serve a constructive means for goal achievement, communication enrichment, and increases in job satisfaction and confidence, as well as developing future leaders.

Utilizing program specific surveys may aid in capturing more useful quantitative data as compared to previously developed and validated tools. Expert survey development is recommended.

Lastly, future research identifying how much the participants of this study utilize the coaching skills and associated skillsets over the long term would be advantageous.

## **Conclusion**

Certified Registered Nurse Anesthetist (CRNA) faculty educators valued their experience as participants of an organized peer coaching curriculum. Participants gained tools and skills associated with awareness of mindset and relationships, communication and feedback, active listening and powerful questions, accountability, and the coaching process. Both individual and group goals progressed for all individuals. The most impactful experiences included having new “tools” to use personally and professionally, group goal progression, and improved communication and collegiality amongst the group.

Analysis of the data confirms the participants’ utilization of coaching strategies, goal attainment as well as improvements in confidence, satisfaction, and collegiality. As previously stated, faculty development is imperative for the enrichment of medical education. Nurse anesthesia educators can benefit from faculty development initiatives, specifically a formal peer coaching curriculum.

## Appendices

### Appendix A: Didactic Coaching Pre-Evaluation Planning Tool

#### **Colleagues Supporting Professional Growth Across the Disciplines**

#### **Sample Pre-Observation Conference Form**

Instructor \_\_\_\_\_ Peer Coach \_\_\_\_\_

1. Observation Logistics:
  - a. Class observation date \_\_\_\_\_
  - b. Classroom location \_\_\_\_\_
  - c. Beginning time \_\_\_\_\_ Ending time \_\_\_\_\_
  - d. Relationship of observer to students: detached \_\_\_\_\_ involved \_\_\_\_\_
  - e. Seating arrangement for observer: anywhere \_\_\_\_\_ assigned \_\_\_\_\_
2. Class Background:
  - a. Subject area \_\_\_\_\_
  - b. Level (level of graduate/medical education) \_\_\_\_\_
  - c. Type (lecture, seminar, lab, lecture/discussion, activity) \_\_\_\_\_
  - d. Number of students \_\_\_\_\_
  - e. Description of student population \_\_\_\_\_
3. Lesson Description
  - a. Learning objective of the lesson:
  - b. Planned teaching behaviors and strategies:
  - c. Any concerns about the lesson:
4. Specific Areas for Observation Focus:
  - a.
  - b.
  - c.
  - d.
5. Post-Observation Conference:
  - a. Place \_\_\_\_\_
  - b. Date \_\_\_\_\_
  - c. Time \_\_\_\_\_

Source: Kinsella<sup>52</sup>



## Appendix B: Didactic Coaching Observation Tool

### Using the Peer Coaching Paradigm to Improve Didactic Instruction

- Observe specific aspects of the didactic process
- Observational educators may watch for:
  1. Student reactions and responses to statements made by the instructor
  2. Off-task behavior of the students
  3. Instructor approaches and behaviors
  4. Other aspects agreed upon in the pre-evaluation arrangement

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- It is recommended that follow-up occur within 2-3 days of the observation to foster some reflection time and memory enhancement.

Rice<sup>1</sup>

1. Rice G. Formative dialogues in teaching nonthreatening peer coaching. *Journal of Chiropractic Education*. 2012;26(1):62-67.

## Appendix C: Introduction to Study

## A Peer Coaching Curriculum's Influence on Medical Educator Effectiveness

Thank you for your willingness to participate in my DrAP capstone project. Your time and effort is *greatly* appreciated. Here is a breakdown of what you can expect:

- Things to do PRIOR to March 30:
  1. Complete the *StrengthsFinder 2.0* Personal Strength Inventory prior to March 30, 2016.
  2. We will be working through a personal and group goal over the course of this project. Begin to consider a personal goal that you would like to work on over the six-month span of this project.
  3. Begin to consider team/group goal ideas that you would like to work on over the six-month span of this project.
  4. Complete all pre-assessments located on the study's blackboard site between March 20 and March 30, 2016. The blackboard course can be found in your course inbox and is titled: **EPD1000A2015R1A: Education Professional Development Assessment Tools**:
    - a. Anonymous Demographic Assessment
    - b. Coaching Self-Evaluation Checklist
    - c. Job Satisfaction Survey
    - d. Collegiality Survey
    - e. Confidence Scale
- March 30<sup>th</sup> study kick-off:
  1. Attend Power of Coaching foundations for coaching session on March 30, 2016
    - a. The class will be located in Siebens 4-05 and begins at 0800.
    - b. This full-day workshop will be presented by the Mayo Clinic Office of Leadership and Organizational Development. They have agreed to provide this education to our group and the pathology educator group privately.
    - c. Lunch will be provided.
  2. Attend the Goal Setting Instruction/Exercise
    - a. This will take place immediately after the Power of Coaching course in the same room. This portion of the class should be concluded by 1700.
    - b. This session is designed to assist with both individual and group goal development. These goals should preferably follow the S.M.A.R.T. goals framework, be attainable within the six-month time span of the project, and personal strengths should be considered.

- Things to expect after March 30<sup>th</sup>:
  1. A face-to-face coaching session is scheduled once per month for 6 months in Siebens 1013A.
    - a. All dates have been assigned to the outlook calendar
    - b. Attached is an additional list of all session dates.
    - c. This will last for one hour between 12-1pm and lunch will be provided.
    - d. The first 15-20 minutes will be devoted to reinforcing a core coaching skillset.
    - e. 5-10 minutes will be devoted to addressing the group goal
    - f. The remainder of time will be devoted to a coaching practicum.
      - i. This will allow you to work through your individual goal
      - ii. This will also give you coaching practice
      - iii. You will be assigned into a triad group which you will remain with for the duration of this study.
      - iv. If there is an individual that you would prefer not to work with in an assigned triad, please inform me prior to March 30<sup>th</sup>.
      - v. Within the 30 minutes of the coaching practicum, each person will take on the role of coach (10 minutes), coachee (10 minutes), and observer (10 minutes).
      - vi. The final ten minutes will be reserved for group reflection and feedback
  2. Each month you are asked to complete the accompanying on-line module, located on the study's blackboard site PRIOR to the face-to-face coaching sessions.
    - a. The blackboard course can be found in your course inbox and is titled: **EPD1000A2015R1A: Education Professional Development**
    - b. Content corresponds to the core coaching skillset to be discussed at the face-to-face session
    - c. This should take you no longer than 15 minutes
  3. Complete post-session reflective journaling.
    - a. To aid in reflection (a component critical to development) you are asked to complete the reflective post-session journaling exercise
    - b. It is more meaningful if performed shortly after the face-to-face sessions
  4. Hold yourself accountable to the performance goals you and your triad partners have set in order to help you reach your individual end goal.
    - a. This most likely will involve effort on your part in between sessions.
    - b. If your individual goal includes a component of improved didactic education, feel free to use your triad partners to engage in peer coaching classroom observation.

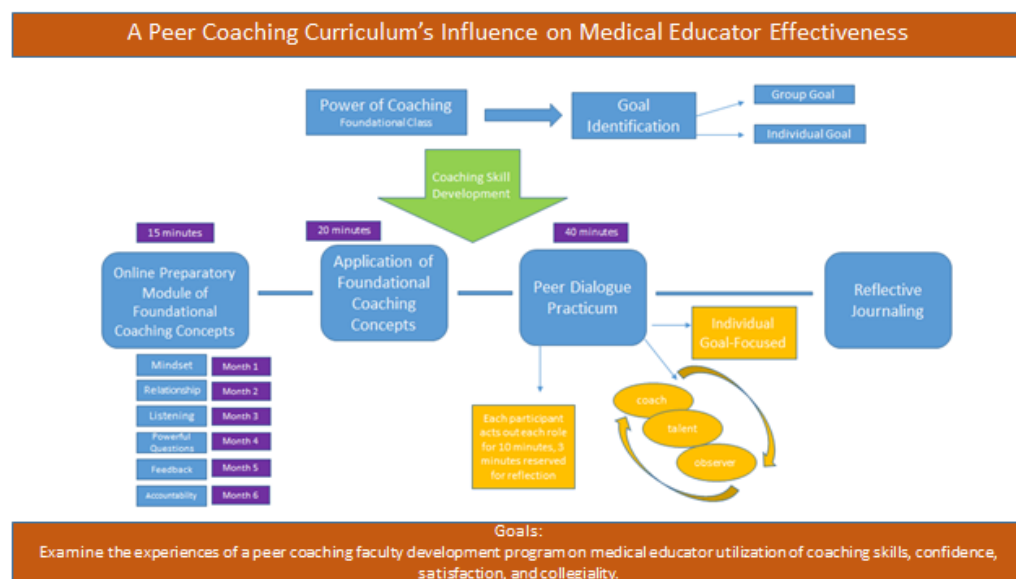
- i. Pre-observation tools and observation tools will be available to you in the blackboard tool-box
5. After the conclusion of all planned components of the study (roughly September) you are requested to participate in a post-study interview debrief.
  - a. This will allow me to collect the qualitative data necessary for the study.

In addition to my gratitude, you will be provided the following for your participation of all activities:

- Personal copy of *StrengthsFinder 2.0*
- Personal copy of *Five Dysfunctions of a Team*
- Meals at all face-to-face events
- \$180 for your time and effort
- Hopefully...a personal benefit as a result of the study efforts!

### Dates to Remember

- March 30 0800-1700
- April 14 1200-1300
- May 12 1200-1300
- June 9 1200-1300
- July 21 1200-1300
- August 11 1200-1300
- September 8 1200-1300



## Appendix D: Oral Consent Form

**ORAL CONSENT TO PARTICIPATE IN EDUCATION RESEARCH**

A Peer Coaching Curriculum's Influence on Medical Educator Effectiveness

PI: LaChelle Wieme

You are being asked to participate in a research study about your *experience* with Peer Coaching on your medical educator professional development. You are being asked to participate in this research study because of your faculty education role within the Department of Anesthesiology Certified Registered Nurse Anesthetists (CRNA) program. Your participation in this study is entirely voluntary. Please read the information below and ask questions about anything you do not understand, before deciding whether or not to participate.

The research study is being conducted by LaChelle Wieme and Carrie Bowler.

**PURPOSE OF THE STUDY**

This study aims to assess the experience of participating in a peer coaching program by faculty medical educators in the CRNA program.

If you agree to volunteer to participate in this study, you will be asked to do the following things:

5. Attend Power of Coaching foundations for coaching session.
6. Complete pre-work in preparation for sessions, e.g. *StrengthsFinder's* assessments, goal setting, coaching modules, pre-assessment survey, etc.
7. Attend 6 monthly 1 hour peer coaching sessions.
8. Engage in the peer coaching process.
9. Complete post-session reflective journaling.
10. Complete post-session assessment survey.
11. Complete post-study interview debrief.

**COMPENSATION FOR PARTICIPATION**

Participants will be compensated at the completion of participation in all events. Remuneration in the amount of \$180/subject will be dispersed at the completion of ALL of the study events listed below. Subjects will forfeit remuneration if unable to complete all study events listed below.

1. Attend Power of Coaching foundations for coaching session.
2. Complete pre-work in preparation for sessions, e.g. *StrengthsFinder's* assessments, goal setting, coaching modules, pre-assessment survey, etc.
3. Attend 6 monthly 1 hour peer coaching sessions.
4. Engage in the peer coaching process.

5. Complete post-session reflective journaling.
6. Complete post-session assessment survey.
7. Complete post-study interview debrief.

## **RISKS**

The risks associated with this research study are minimal and include:

- ☐ Time burden to participate in all research activities
- ☐ Discomfort of being interviewed and writing personal reflective journal narratives

## **CONFIDENTIALITY**

Any information that is obtained in connection with this study and can be identified will remain confidential and will be disclosed only with your permission or as required by law. For purposes of data analysis, individual participant data will remain confidential and not be disclosed except to authorized person. Data reported will be collated based on six peer coaching sessions. Finally, faculty will be assigned unique identifiers, a random number, as appropriate for publication and reporting purposes. Journal entries, interview recordings, and field notes will be stored in a secure network folder until grant requirements are fulfilled.

## **PARTICIPATION AND WITHDRAWAL**

Please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time. Remuneration is dependent upon completion of all study activities.

## **IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about this research, please contact:

|  |  |
|--|--|
| Carrie Bowler  | LaChelle Wieme   |
| <a href="mailto:Bowler.carrie@Mayo.edu">Bowler.carrie@Mayo.edu</a> | <a href="mailto:Wieme.lachelle@mayo.edu">Wieme.lachelle@mayo.edu</a> |
| 507-538-4432   | 507-284-8331   |

If you have any concerns, complaints, or general questions about research or your rights as a participant, please contact the Mayo Institutional Review Board (IRB) to speak to someone independent of the research team at 507-266-4000 or toll free at 866-273-4681

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study.

Appendix E: Literature Review Table

| Reference      | Population   | Aim  | Design   | Strategies   | Results   | Limitations   |
|----------------|--|--|--|--|---|---|
| Irby, 1994     | 6 distinguished medical educators in general internal medicine | To identify the components of knowledge that effective clinical educators need   | Qualitative analysis of expert medical educators | Analysis of data from interviews, a structured task, and observations of each ward team to determine themes, or domains of knowledge   | Superior medical education includes not only components of content expertise and knowledge of the learners, the educator must obtain knowledge of general principles related to teaching and learning   | Lacked information describing the distinction of excellence of the six educators studied<br>Small sample size                     |
| Steinert, 2006 | Medical Educators  | Improve teaching effectiveness in medical education: What are the effects of faculty development interventions on the knowledge, attitudes, and skills of teachers in medical education, and on the institutions in which they work? | Systematic Review                                | Search included Medline, ERIC, and EMBASE (1980-2002). Included articles with a focus on faculty development to improve teaching effectiveness, targeting basic and clinical scientists. Data synthesized using Kirkpatrick's four levels of educational outcomes. | Participants reported positive changes in attitudes towards faculty development and teaching. Reported increased knowledge of educational principles and gains in teaching skills. Where formal tests of knowledge were used, significant gains were shown. Changes in teaching behavior were consistently reported by participants and were also detected by students. Changes in organizational practice and student learning | Time-limited Medical education articles are excluded from MEDLINE and ERIC prior to 2002, relying on a hand search by the authors |

|                             |   |   |                      |  |   |   |
|-----------------------------|---|---|----------------------|--|---|---|
|                             |   |   |                      |  | <p>were not frequently investigated. However, reported changes included greater educational involvement and establishment of collegiate networks. Key features of effective faculty development contributing to effectiveness included the use of experimental learning, provision of feedback, effective peer and colleague relationships, well-designed interventions following principles of teaching and learning, and the use of a diversity of educational methods within single interventions.</p> |   |
| <b><u>Flynn, 1994</u></b>   | 2 family medicine physicians                    | To validate peer coaching's use in medical clinical education | Case report          | Several precepting encounters between the faculty and residents were observed and analyzed | Improvements in self-awareness of clinical teaching behaviors, the ability to improve specific teaching skills, and the rewards of a collaborative relationship between colleagues were noted.  | Case study design<br>Limited description of assessment strategies |
| <b><u>Goldman, 2012</u></b> | Graduates of a fellowship program at the George | To describe the development of faculty members' post-         | Qualitative analysis | One cohort (n=10) participated in a structures   | Despite similar implementation challenges expressed by  | Small sample size   |



|                             |  |  |   |  |  |   |
|-----------------------------|--|--|---|--|--|---|
|                             | Washington University School of Medicine and Health Sciences   | fellowship leadership plans and a structures process to support plan implementation and to compare the implementation of initiatives specified in individual leadership plans of two cohorts of faculty. |   | process of monthly reciprocal peer coaching, followed by journaling and quarterly interviews with the program director; a second cohort (n=9) functioned as a comparison with no structures process supporting them. | both cohorts, the cohort participating in the structures process implemented 23% more of their planned initiatives related to developing new curriculum. The combination of plan development, reciprocal peer coaching, journaling, and interview discussions provided faculty with focus, structure, and personal support. This structured process supporting leadership plan development and implementation can be easily transferred to other fellowship programs in medical education, adapted for use with residents and fellows, and used in similar development programs. |   |
| <b><u>Goldman, 2013</u></b> | Members of a faculty medical education fellowship program at George Washington University School of Medicine and Health Sciences | To assess the experience of implementing an individualized leadership plan in a medical academic setting, specifically, coaching and reflection's contribution   | Qualitative inquiry to provide an understanding of the implementation experience and specific contributions of coaching and reflection. | Yearlong implementation of individual leadership plans supported by reciprocal peer coaching, journaling, and discussion   | The findings indicate the importance of structuring the process of plan implementation support, and the emotional, functional, and developmental benefits of both receiving and  | Focus on using peer coaching for leadership development |

|                              |   |   |                      |   |   |  |
|------------------------------|---|---|----------------------|---|---|--|
|                              |   |   |                      |   | giving reciprocal peer coaching.  |  |
| <b><u>Hekelman, 1994</u></b> | Physician medical educators in the clinical setting | To assess the formative development of the peer coaching program to date as a faculty development mechanism for improving and enhancing the physicians' repertoire of clinical teaching skills. | Qualitative analysis | 6 physician faculty members paired in dyads to observe, interact with, and coach one another throughout an 18 month long period. Format included pre-observation, observation, and post-observation stages as a framework to provide periodic feedback regarding teaching proficiency | All clinician teachers who participated have affirmed the value of the peer coaching curriculum. Each participant identified improvement in some aspect of his/her teaching and attributed gains to the project, participants reported a heightened awareness of the importance of teaching. Several acknowledged a new found view point that precepting is teaching, not merely supervision. Where peer coaching relationships were initially anxiety laden and distant, they now have become comfortable collegial interactions which are anticipated and welcomed. Clinician teachers are demonstrating markedly greater willingness to guide students and residents through the decision-making | Lacks assessment details used to reach conclusions |

|                           |  |  |   |   |  |                         |
|---------------------------|--|--|---|---|--|-------------------------|
|                           |  |  |   |   | <p>process rather than making clinical decisions for them. There is notably greater tolerance for ambiguity on the part of the teacher, especially if patient safety is not in jeopardy. Self-analysis of clinical teaching is becoming routine, leading to shifts in individual teaching behavior to fit the situation at the moment. Participants desire and seek feedback from students. Peer coaching was acknowledged to be labor - intensive and time consuming; however, participants found it to be worthwhile</p> |                         |
| <b><u>Himes, 2012</u></b> | Novice (first year) nursing students participating in a Fundamentals Skills Laboratory | To measure the impact of situated peer coaching of unfolding case studies on student satisfaction, perceptions of learning, and self-evaluations in the Fundamentals Skills Laboratory | Quasi-experimental design with pre and post-intervention data | 104 nursing students participated in the Fundamentals Skills Laboratory. Instructors provide the initial demonstration and direction about a skill, then students pair up for the scenarios. One student acts as a coach and the other as a nurse. Peer coaches | Students' rating of a fundamental skills lab remained high after integrating a peer coaching component. Self-evaluations of the students' performance were higher. Students appreciated the personalized feedback associated with peer coaching and demonstrated   | Lack of a control group |

|                             |                               |  |                    |   |  |   |
|-----------------------------|-------------------------------|--|--------------------|---|--|---|
|                             |                               |  |                    | <p>follow a script to advance a scenario through role play. Peer coaches provide real-time personalized feedback as being critical to learning. The peer coaches are also given probing questions to stimulate thought. Scripts describe what actions and responses to watch for from the laboratory partner. The pair works through a debriefing discussion at the end. Instructors monitor student pairs and provide additional insight and feedback. After the first scenario is completed, the students switch roles. A University Student Ratings tool was used as well as a Simulation Evaluation Tool to assess.</p> | <p>strong motivation and self-regulation in learning. By participating in unfolding case studies with situated peer coaching, students focus on safety issues, practice collaborative communication, and critical thinking in addition to performing psychomotor skills.</p> |   |
| <b><u>Huston, 2008.</u></b> | 10 experienced senior faculty | Validating and providing recommendations for peer coaching program | Pilot, qualitative | 10 senior faculty members engaged in 1 year of classes, training, and reciprocal coaching with partner. Additional year of voluntary coaching for others  | Participants rated the experience positively. Participants stated that they learned a lot about their teaching style by coaching and being coached   | Did not define what “experienced, senior faculty” constitutes. Did not describe their evaluation system and what exactly they learned from the experience other than it seemed to work and it |

|                               |  |  |                      |   |   |   |
|-------------------------------|--|--|----------------------|---|---|---|
|                               |  |  |                      |   |   | was sought after post-study.  |
| <b><u>Jaceelon, 2003,</u></b> | 4 tenure-track (new) nursing faculty   | Provide discipline, critique, collegiality   | Qualitative pilot    | New faculty members mentor each other based on the knowledge gained in their doctorate programs and through sharing what they have learned from their mentors.  | Success in individual and collective scholarship productivity, more research collaboration, improved mutual expertise, stronger relationships with each other   | Limited information as to how outcomes were assessed                                    |
| <b><u>Moss, 2008</u></b>      | Junior faculty members in an academic department of psychiatry at Sunnybrook Hospital, University of Toronto | To document and evaluate the initiation of a mentoring model for junior faculty utilizing a peer group approach rather than the traditional dyadic model | Qualitative analysis | Junior faculty members in an academic department of psychiatry at Sunnybrook Hospital, University of Toronto, were invited to take part in a peer mentoring program involving evening meetings every 2 months over a 1-year period from 2004-2005. Of the 12 invitees, 10 agreed to participate in the program. The group participants developed the program agenda collectively. Learning objectives as well as a list of topics of interest were established at the inaugural meeting. A focus group was held at the end of 12 months to provide a descriptive, | The report prepared by the focus group leader identified six main themes that included: program development, knowledge gains, interpersonal gains, psychological/e motivational gains, process of the program, and future directions. The overall response was clearly favorable with a unanimous decision to maintain the group and continue meeting into the next year. | Small sample size<br>Lack of control group<br>Lack of randomization<br>Short time frame |

|                              |  |   |  |  |   |   |
|------------------------------|--|---|--|--|---|---|
|                              |  |   |  | qualitative evaluation. The focus group leader prepared a report based on observations and notes taken during the focus group.   |   |   |
| <b><u>Parker, 2008</u></b>   | MBA students   | To discover outcomes of a peer coaching program.<br>To offer the characteristics of an effective peer-coaching relationship and the impact of these characteristics | Multiple regression analysis           | Survey to 209 MBA students 6 months after involvement in a peer coaching program   | Peer coaching is most successful when it happens through the three step process of 1) building a developmental relationship; 2) creating success in development; 3) internalizing the learning tactic by applying the peer-coaching process in future relationships |   |
| <b><u>Parker, 2015</u></b>   | Participants of a 1 week leadership development program for high potential employees   | To integrate the theory of coordinated management of meaning to emphasize how meaning and learning are created through interpersonal interactions                   | Balcony perspective to assess subjects | Exposed two volunteers to the coaching process which included a 3 step model coordinated by the management of meaning models   | Using the 3 step management of meaning model in peer coaching can enhance positive outcomes for both individuals and organizations.   | Limited to 2 subjects<br>Built upon the previous work of the author<br>Limited information about evaluation process<br>Limited information about the participants |
| <b><u>Santucci, 2008</u></b> | A group of postdoctoral (n=5) scholars and junior faculty from the Schools of the Health Sciences at the University of Pittsburgh. | Describes a model for the development, process, and tracking methods of a Peer-mentored Research Development Meeting (PRDM), an interdisciplinary peer mentoring    | Case report                            | From February 2004 through February 2006, PRDM's first five members tracked and documented their research activity (e.g., manuscripts, grants) every 4 months. The defining features | During the 24-month data collection period, members were involved in 91 research development projects including grant applications, journal article manuscripts, book chapters,   | Cannot account for all variables<br>Small sample size<br>Lacks control group  |

|                                |  |   |   |   |  |                   |
|--------------------------------|--|---|---|---|--|-------------------|
|                                |  | program   |   | of PRDM are adherence to a structured frequency and format for meetings, systematic tracking and evaluation of research development activities, and maintenance of ongoing relationships with senior mentors. | and conference abstracts. Members' productivity increased during the 24-month period, as did the efficiency and focus of the completed projects.   |                   |
| <b><u>Schwellnus, 2014</u></b> | Health care educators                              | To review the literature from health care training and education to determine the nature and use of peer-coaching | Lit. review   | Scoping review methodology<br>16/137 met inclusion criteria   | Most research is being conducted within the domains of nursing and medicine within North America. The number of studies has increased in frequency over the past 10 years. Interest in developing the potential of peer0coaching in both health care student education and continuing clinical education of health care professionals has grown. Future directions for research in this quickly developing area are included |                   |
| <b><u>Sekerka, 2003</u></b>    | 13 physician coaches in an ambulatory care setting | To identify perceived benefits coaches received from a coaching   | Inductive qualitative method using grounded theory and thematic | Observation and video recording of coaching experiences of 13 physician   | Coaches experienced improvements in reflection and teaching as well  | Small sample size |

|                             |   | encounter and how this relates to their own process of professional development   | analysis  | coaches  | as personal learning and change.   |  |
|-----------------------------|---|---|---|--|--|--|
| <b><u>Shollen, 2014</u></b> | Full-time faculty at the University of Minnesota Medical School | To examine the relationships among having formal and informal mentors, mentoring behaviors, and satisfaction and productivity for academic medicine faculty | Survey 354 respondents (58% participation)                  | Survey disseminated to assess perceptions of variables associated with job satisfaction and productivity. Analysis focused on perceptions of mentoring as related to satisfaction with current position and productivity and role as a primary investigator or co-PI | Informal mentoring was more important for satisfaction and formal mentoring was more important for productivity. Regardless of mentor type, the 14 mentoring behaviors examined related more to satisfaction than productivity. Although participants reported formal and informal mentors performed the same mentoring behaviors, mentees were more satisfied or productive when some behaviors were performed by formal mentors. | Unable to account for confounding variables<br>Lacks generalizable conclusion  |
| <b><u>Skinner, 1996</u></b> | 7 faculty members from the College of Charleston                | To formulate and assess a peer coaching program for college faculty   | Program development and survey assessment post intervention | Three coaching teams consisting of 2 or 3 instructors were given instruction and guidance for observation and feedback delivery. Investigators collected forms documenting the observations and coaching as well as questions and concerns.                          | Programs should have clear purposes and procedures at the beginning, provide formal coaching training, provide incentives for participation, and reflect support institutional culture.  | Little detail offered regarding the participants. Participants were not assessed prior to the intervention nor was there a control group |
| <b><u>Tessens, 2011</u></b> | Senior women  | To identify   | Qualitative   | Survey   | Over 80% of  | Takes place in   |



|                            |                               |   |          |          |  |             |
|----------------------------|-------------------------------|---|----------|----------|--|-------------|
|                            | in higher education positions | current needs and challenges of senior women at two different Australian universities | analysis |          | respondents considered that a senior women's leadership program would provide knowledge and skills for leadership in the current tough working environment. The preferred content included skills in people management, political awareness, operational issues and career development, and preferred format was mentoring, peer networks, coaching, 360-feedback, and shadowing and mentoring at another university. Themes emerged include: the impact of excessive workloads and high levels of administration on their effectiveness; the need for peer and supervisor support and networks, underpinned by effective organizational skills and administrative support; and gendering of careers | Australia   |
| <b><u>Varkey, 2012</u></b> | Women medical                 | To describe a   | Survey   | 19 women | At the end of the  | Short study |

|                             |   |   |   |  |   |  |
|-----------------------------|---|---|---|--|---|--|
|                             | faculty within the Division of Preventive and Occupational Medicine at the Mayo Clinic, Rochester, MN | facilitated peer mentoring program's impact on academic skills, self-efficacy, and academic career satisfaction |   | enrolled in the peer mentoring program were divided into 5 groups. Each group had an assigned facilitator. Members of the respective groups met together with their facilitators at regular intervals during the 12 months of the project. A pre- and post-program evaluation consisting of a 23 item self-assessment of academic skills, self-efficacy, and academic career satisfaction was administered to each participant | 12 months, 9 manuscripts were submitted to peer-reviewed journals, 6 of which were published. At the end of the program, participants reported an increase in their satisfaction with academic achievement; improvement in skills necessary to effectively search the medical literature, an improvement in their ability to write a comprehensive review article, and an improvement in their ability to critical evaluate the medical literature. | duration<br>Lacks control group to compare                                   |
| <b><u>Waddell, 2005</u></b> | Nursing educators   | To assess the impact knowledge, skill, and empowerment for changing clinical practice                           | Coaching versus traditional teaching for clinical breast examinations | Coaching consultants were hired to use coaching, rather than traditional teaching for clinical breast examinations. Pre and post-assessment of lump sensitivity and specificity in silicone breast models. Time, technique, and performance outcomes were compared using the pre and post-assessments.   | Improvement in performance was noted when a peer coaching curriculum was used as compared to traditional instruction.   | Limited information on assessment of intervention and details of the results |
| <b><u>Wasburn, 2007</u></b> | Women faculty   | To introduce the implementation of a strategic collaboration  | Case study  | Implementation of a strategic collaboration model for  | Strategic collaboration, peer- oriented mentoring   | Case study   |

|                               |  |  |  |   |   |  |
|-------------------------------|--|--|--|---|---|--|
|                               |  | model for mentoring  |  | mentoring   | removes many of the problems inherent in traditional mentoring programs while also retaining their benefits and suggests that it can be particularly beneficial for women seeking further career advancement. |  |
| <b><u>Zadvinskis 2015</u></b> | Nurses and patient care assistants                                       | Validate peer coaching model to improve safe patient handling  | Use of change model in preparation of peer coaches for safe patient handling | Lecture, hands-on experience, scripting   | Unit-focused peer coaches are a helpful adjunct to nursing staff development.   | Practice narrowly focused  |
| <b><u>Bowman, 2001</u></b>    | 32 undergraduate elementary education majors                             | To determine the impact of a peer coaching experience in field study, specifically in regard to 1) development of clarity skills, 2) pedagogical reasoning and actions, 3) attitudes towards several aspects of the field experience | Prospective, randomized experience assessment compared to control            | Students were randomly assigned to an experimental group (n=16) that employed peer coaching dyads or to a control group (n=16) that experienced traditional supervision.  | Major themes discovered: collaboration, collegiality, communication, and cooperation  | This study addressed the teaching training experience of undergraduate education students at the novice level. |
| <b><u>Horn, 2002,</u></b>     | 15 teachers, 2 administrator 2 professors 2 education doctorate students | Development of a peer coaching program as a way for promoting collaboration in order to improve classroom instruction  | 4 year case study  | Participants exposed to 2 day-long sessions devoted to the concept of peer coaching. Participants were divided up into 3 person teams and met two to three times monthly. Data collection included interviews, open-ended questions, meeting notes, | Major themes discovered: collaboration, collegiality, communication, and cooperation  | Case study design<br>Small sample size<br>Lacking control group  |

|                              |  |   |  |  |  |  |
|------------------------------|--|---|--|--|--|--|
|                              |  |   |  | observation notes, teacher reflections and coaching logs.  |  |  |
| <b><u>Rice, 2012</u></b>     | Health care faculty at Loma Linda University | Learning enhancement of the health professionals classroom  | Curriculum development and post-participation survey | Faculty can request a collegial, nonthreatening observation and discussion of a teaching session.  | The program contributes to enhancing the learning environment of the health professional classroom as well as offers the faculty member ways to deliver new and more effective ways to enhance learning.   | Little information was provided to describe the assessment other than program evaluation comment examples. |
| <b><u>Wininger, 2012</u></b> | 126 college instructors                      | To provide a descriptive analysis of the use of seven instructional feedback sources by university instructors and instructors' perceptions of value with regard to those sources. To examine correlations between job satisfaction and usage frequency for each source of feedback. To examine the relationships among the three basic psychological needs (autonomy, competence, and relatedness) and the degree of utilization of the seven feedback sources. Examine the relationship between the | Survey distributed via email                         | Surveys were distributed to 726 faculty members. 126 responded to represent a 17% response rate. The survey consisted of three separate questionnaires: Source of Feedback Questionnaire, Basic Needs Satisfaction Questionnaire, Present Job Satisfaction Questionnaire | Self-assessment was found to be the most utilized feedback tool and feedback from students was the most useful. Utilization of institutional student ratings was significantly correlated with job satisfaction. Autonomy and competence were not significantly correlated with the utilization of mentioned feedback. Relatedness was impacted and was related to either student or colleague relations. Peer observations were significantly correlated to colleague relatedness. Job satisfaction was significantly | Poor response rate, lacked descriptions of various feedback modes  |

|                           |                           | three basic needs and job satisfaction   |                      |  | correlated with the basic needs: autonomy, competence, and relatedness with colleagues.  |  |
|---------------------------|---------------------------|--|----------------------|--|--|--|
| <b><u>Zwart, 2007</u></b> | Secondary school teachers | To determine what patterns of change in cognition and or behavior take place in experienced teachers when they participate in a reciprocal peer coaching trajectory. | Qualitative analysis | Teachers participated in a 1 year reciprocal peer coaching trajectory that started with a two day workshop. Participants were placed into dyads. Participants attended 3 follow-up meetings during the year. Sources of data collection included audiotapes of coaching conferences, audiotapes of semi-structured learning interviews by telephone, and digital diaries with teacher reports of learning experiences. Analyzed and categorized types of patterns of change in behavior and or cognition by using an adaptation of the Interconnected Model of Teacher Professional Growth as an analytical tool | Teachers reported changes in cognition more often than changes in behavior. Reflection and enactment occurred more frequently. | Secondary teaching level used<br>Small sample size |

## Appendix F: Goal Development PowerPoint

## GOAL SETTING

Coaching aims to eliminate both the external and the internal obstacles to achievement of a goal.

1

### CALCULATE WHAT MIGHT BE POSSIBLE

- We tend to get what we focus on.
- If we fear failure, we are focused on failure and that is what we get.
- Rather than setting goals based on what has been done before, concentrate on what can be done in the future.

Focus on problems, you'll have more problems. When you focus on possibilities, you'll have more opportunities. Dream. Wish. Make it happen.

2

### MAKING IT HAPPEN

- Ascertain the ideal long-term solution, and then determine realistic steps toward that ideal.
- The approach can be much more hopeful, creative, and motivating.

3

### END GOAL

- The final objective
- May not be entirely within your control
- Provides inspiration

4

### PERFORMANCE GOAL

- Identification of the performance level that you believe will provide you with a very good chance of achieving the end goal.
- This will likely be within your control and provides a means of measuring progress.
- Defines specification

5

6

### QUALITIES OF A GOOD GOAL

- S.M.A.R.T.
- P.U.R.E.
- CLEAR.

7

### SMART

- Specific
- Measurable
- Agreed
- Realistic (instills hope)
- Time phased

8

### P.U.R.E.

- Positively stated
- Understood (avoids inaccurate assumptions)
- Relevant
- Ethical

9

### CLEAR

- Challenging (encourages motivation)
- Legal
- Environmentally sound
- Appropriate
- Recorded

10

| SMART                     | PURE                                       | CLEAR                               |
|---------------------------|--|-------------------------------------|
| Specific                  | Positively stated                          | Challenging (encourages motivation) |
| Measurable                | Understood (avoids inaccurate assumptions) | Legal                               |
| Agreed                    | Relevant                                   | Environmentally sound               |
| Realistic (instills hope) | Ethical                                    | Appropriate                         |
| Time phased               |  | Recorded                            |

11

### STRENGTHS-FOCUSED GOALS

**TALENT**  
A natural way of thinking, feeling, or behaving

**INVESTMENT**  
Time spent practicing, developing your skills, and building your knowledge base

**STRENGTH**  
The ability to consistently provide near-perfect performance

12

### STRENGTHSFINDER 2.0

- "Each person has a greater potential for success in specific areas, and the key to human development is building on who you already are." (Petri, 2007)
- When we're able to put most of our energy into developing our natural talents, extraordinary room for growth exists.
- Having the opportunity to develop our strengths is more important to our success than our role, our title, or even our pay.

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### DEVELOPING OUR STRENGTHS

- Strength-based approach to self-development improves ones:
  - Confidence
  - Direction
  - Hope
  - Kindness towards others.

"While it may be possible, with a considerable amount of work, to add talent where little exists, our research suggests that this may not be the best use of your time. Instead, we're discovering that the most successful people start with dominant talent and then add skills, knowledge, and practice to the mix. When they do this, their talent actually serves as a multiplier." (Petri)

14

### GROUP GOAL DEVELOPMENT

15

### INDIVIDUAL GOAL DEVELOPMENT

- Consider your teammates...
  - What is each person's single most important behavioral quality that contributes to the strength of the team? (That is, their strength)

16

### REMINDERS...

- Follow the S.M.A.R.T. goal framework
- Choose a goal that can be accomplished within the 4 month time span of this study
- Consider your personal strengths but... push yourself beyond your comfort zone
- Use the paper Individual Goal Tracker tool along the way

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### REFERENCES

- Lentzen, R. (2002). The five disciplines of a team. A leadership book. San Francisco, CA: Jossey-Bass.
- Petri, R. (2007). Strengthfinder 2.0. New York, NY: Gallup Press.
- Whitney, J. (2010). Coaching for performance: Growing human potential and purpose. Boston, MA: Harvard Business Publishing.

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Appendix G: *Power of Coaching* Observer Checklist***Power of Coaching Observer Checklist***

Coach:



| Coaching Skills   | Comments |
|---|----------|
| <b>Engage</b> -Set a clear goal for the session   |          |
| <b>Explore</b> -Expanded the talent's awareness and developed an appreciative perspective |          |
| <b>Envision</b> -Explored the future state  |          |
| <b>Expand</b> -Determined action steps  |          |
| <b>Execute</b> -Held the talent accountable   |          |
| Listened attentively (focused and intuitive listening)                                    |          |
| Coached the person, not the problem   |          |
| Challenged the talent to stretch  |          |
| Asked open-ended and non-leading questions (i.e. powerful questions)                      |          |
| Gave appreciative feedback  |          |

What did the coach do well that helped to move the talent forward? □

Where is the developmental opportunity for this coach?

## Appendix H: Anonymous Demographic Survey

## Demographics

Please indicate your gender.

- A. Male
- B. Female

How long have you been practicing as a Certified Registered Nurse Anesthetist (CRNA)?

- A. 0-1 year
- B. 1-3 years
- C. 3-5 years
- D. 5-10 years
- E. >10 years

How long have you been in a formal medical education role?

- A. 0-1 year
- B. 1-3 years
- C. 3-5 years
- D. 5-10 years
- E. >10 years



## Appendix I: Coaching Skillset Assessment Tool

| COACHING TOOLS  |  |     |    |
|---|--|-----|----|
| <i>A Coach's Self-Evaluation Checklist</i>  |  |     |    |
| <i>The questions below relate to the skills and qualities needed to be an effective coach.<br/>           Use this tool to evaluate your own effectiveness as a coach.</i>  |  |     |    |
|   | Question   | Yes | No |
| 1   | Do you show interest in career development, not just short-term performance  |     |    |
| 2   | Do you provide both support and autonomy?  |     |    |
| 3   | Do you set high yet attainable goals?  |     |    |
| 4   | Do you serve as a role model?  |     |    |
| 5   | Do you communicate business strategies and expected behaviors as a basis for establishing objectives?                            |     |    |
| 6   | Do you work with the individual you are coaching to generate alternative approaches to solutions that you can consider together? |     |    |
| 7   | Before giving feedback, do you observe carefully, and without bias, the individual you are coaching?                             |     |    |
| 8   | Do you separate observation from judgments or assumptions?   |     |    |
| 9   | Do you test your theories about a person's behavior before acting on   |     |    |
| 10  | Are you careful to avoid using your own performance as a yardstick to measure others?  |     |    |
| 11  | Do you focus your attention and avoid distractions when someone is talking to you?   |     |    |
| 12  | Do you paraphrase or use some other method to clarify what is being said in a discussion?  |     |    |
| 13  | Do you use relaxed body language and verbal cues to encourage a speaker during conversation?                                     |     |    |
| 14  | Do you use open-ended questions to promote sharing of ideas and information?   |     |    |
| 15  | Do you use specific feedback?  |     |    |
| 16  | Do you use timely feedback?  |     |    |
| 17  | Do you give feedback that focuses on behavior and its consequences (rather than on vague judgments)?                             |     |    |
| 18  | Do you give positive as well as negative feedback?   |     |    |
| 19  | Do you try to reach agreement on desired goals and outcomes rather than simply dictate them?                                     |     |    |
| 20  | Do you try to prepare for coaching discussions in advance?   |     |    |
| 21  | Do you always follow up on a coaching discussion to make sure progress is proceeding as planned?                                 |     |    |
|   | <b>Totals</b>  |     |    |
| When you have these characteristics and use these strategies, people trust you and turn to you for both professional and personal support. If you answered "yes" to most of these questions, you are probably an effective coach. If you answered "no" to some or many of these questions, you may want to consider how you can further develop your coaching skills. |  |     |    |

## Appendix J: Survey of Collegial Communication

| SURVEY OF COLLEGIAL COMMUNICATION  |   |                       |                    |                |                   |                        |
|--|---|-----------------------|--------------------|----------------|-------------------|------------------------|
| Copyright Judith E. Beyer, 1981. All rights reserved.                            |   |                       |                    |                |                   |                        |
| PLEASE RESPOND TO BOTH<br>COORESPONDING<br>STATEMENTS FOLLOWING<br>EACH QUESTION |   | To very little extent | To a little extent | To some extent | To a great extent | To a very great extent |
| 1  | Do faculty maintain high standards of group performance?                        |                       |                    |                |                   |                        |
|  | This is how it is now   | 1                     | 2                  | 3              | 4                 | 5                      |
|  | This is how I'd like it to be   | 1                     | 2                  | 3              | 4                 | 5                      |
| 2  | Is confidence promoted among faculty colleagues?                                |                       |                    |                |                   |                        |
|  | This is how it is now   | 1                     | 2                  | 3              | 4                 | 5                      |
|  | This is how I'd like it to be   | 1                     | 2                  | 3              | 4                 | 5                      |
| 3  | Do faculty encourage each other to work as a team?                              |                       |                    |                |                   |                        |
|  | This is how it is now   | 1                     | 2                  | 3              | 4                 | 5                      |
|  | This is how I'd like it to be   | 1                     | 2                  | 3              | 4                 | 5                      |
| 4  | Do faculty encourage each other to give their best effort?                      |                       |                    |                |                   |                        |
|  | This is how it is now   | 1                     | 2                  | 3              | 4                 | 5                      |
|  | This is how I'd like it to be   | 1                     | 2                  | 3              | 4                 | 5                      |
| 5  | Do faculty feel free to exchange ideas and opinions?                            |                       |                    |                |                   |                        |
|  | This is how it is now   | 1                     | 2                  | 3              | 4                 | 5                      |
|  | This is how I'd like it to be   | 1                     | 2                  | 3              | 4                 | 5                      |
| 6  | Do faculty deal with conflict open and objectively?                             |                       |                    |                |                   |                        |
|  | This is how it is now   | 1                     | 2                  | 3              | 4                 | 5                      |
|  | This is how I'd like it to be   | 1                     | 2                  | 3              | 4                 | 5                      |
| 7  | Is information about important events and situations shared within the faculty? |                       |                    |                |                   |                        |
|  | This is how it is now   | 1                     | 2                  | 3              | 4                 | 5                      |
|  | This is how I'd like it to be   | 1                     | 2                  | 3              | 4                 | 5                      |

|    |  |   |   |   |   |   |
|----|--|---|---|---|---|---|
| 8  | Are faculty willing to share knowledge and lend assistance to colleagues in their fields of expertise? |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 9  | Do faculty colleagues give each other praise and positive feedback?                                    |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 10 | Do faculty feel safe to disagree with the opinions of colleagues?                                      |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 11 | Is there confidence and trust among faculty colleagues?  |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 12 | Do faculty contribute to the confidence of colleagues as faculty members?                              |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 13 | Is trust promoted among faculty colleagues?  |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 14 | Do faculty coordinate their efforts in working toward group goals?                                     |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 15 | Do faculty cooperate for the achievement of group goals?   |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 16 | Do faculty feel free to discuss job-related problems and difficulties with colleagues?                 |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 17 | Do faculty welcome the information that colleagues provide?  |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |

|    |   |   |   |   |   |   |
|----|---|---|---|---|---|---|
| 18 | Do faculty colleagues help to orient and socialize new members?                         |   |   |   |   |   |
|    | This is how it is now   | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be   | 1 | 2 | 3 | 4 | 5 |
| 19 | Do colleagues assist each other to resolve job-related problems?                        |   |   |   |   |   |
|    | This is how it is now   | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be   | 1 | 2 | 3 | 4 | 5 |
| 20 | Do faculty assist colleagues to do their best work?                                     |   |   |   |   |   |
|    | This is how it is now   | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be   | 1 | 2 | 3 | 4 | 5 |
| 21 | Do colleagues pull their share of the workload?   |   |   |   |   |   |
|    | This is how it is now   | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be   | 1 | 2 | 3 | 4 | 5 |
| 22 | Do faculty give recognition to colleagues for good work?                                |   |   |   |   |   |
|    | This is how it is now   | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be   | 1 | 2 | 3 | 4 | 5 |
| 23 | Do faculty listen to what colleagues have to say?                                       |   |   |   |   |   |
|    | This is how it is now   | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be   | 1 | 2 | 3 | 4 | 5 |
| 24 | Do faculty offer each other new ideas for job-related problems?                         |   |   |   |   |   |
|    | This is how it is now   | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be   | 1 | 2 | 3 | 4 | 5 |
| 25 | Do faculty stimulate creativity among colleagues?                                       |   |   |   |   |   |
|    | This is how it is now   | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be   | 1 | 2 | 3 | 4 | 5 |
| 26 | Do faculty value creativity among colleagues?   |   |   |   |   |   |
|    | This is how it is now   | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be   | 1 | 2 | 3 | 4 | 5 |
| 27 | Are faculty willing to adopt new ideas and approaches to job related problems?          |   |   |   |   |   |
|    | This is how it is now   | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be   | 1 | 2 | 3 | 4 | 5 |
| 28 | Are faculty able to resolve differences without excessive psychological cost or damage? |   |   |   |   |   |
|    | This is how it is now   | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be   | 1 | 2 | 3 | 4 | 5 |

|    |  |   |   |   |   |   |
|----|--|---|---|---|---|---|
| 29 | Do faculty feel psychologically safe and secure in collegial relationships?            |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 30 | Is criticism among faculty members constructive?                                       |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 31 | Do faculty promote a relaxed, nonstressful work atmosphere?                            |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 32 | Do faculty establish and maintain friendly working relationships with colleagues?      |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 33 | Is it easy to approach colleagues?   |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 34 | Does face-to-face communication among faculty have a relaxed, "easy-going" tone?       |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 35 | Does warmth toward, interest in, and concern for colleagues exist within the facility? |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 36 | Do faculty feel confident to "be themselves" among colleagues?                         |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 37 | Do faculty support colleagues' attempts to do their best work?                         |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 38 | Are faculty receptive to the ideas and suggestions of colleagues?                      |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |
| 39 | Do faculty support the creative efforts of colleagues?                                 |   |   |   |   |   |
|    | This is how it is now  | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be  | 1 | 2 | 3 | 4 | 5 |

|    |   |   |   |   |   |   |
|----|---|---|---|---|---|---|
| 40 | Do faculty enjoy contact with each other? |   |   |   |   |   |
|    | This is how it is now                     | 1 | 2 | 3 | 4 | 5 |
|    | This is how I'd like it to be             | 1 | 2 | 3 | 4 | 5 |

Source Beyer<sup>85</sup>

## Appendix K: Job Satisfaction Survey (JSS)

| <b>JOB SATISFACTION SURVEY</b><br>Copyright Paul E. Spector 1994, All rights reserved. |   |   |
|--|---|---|
|  | PLEASE CIRCLE THE ONE NUMBER FOR EACH<br>QUESTION THAT COMES CLOSEST TO REFLECTING<br>YOUR OPINION<br>ABOUT IT. | Disagree very much<br>Disagree moderately<br>Disagree slightly<br>Agree slightly<br>Agree moderately<br>Agree very much |
| 1  | When I do a good job, I receive the recognition for it that I should receive.                                   | 1 2 3 4 5 6   |
| 2  | Many of our rules and procedures make doing a good job difficult.   | 1 2 3 4 5 6   |
| 3  | I like the people I work with.  | 1 2 3 4 5 6   |
| 4  | I sometimes feel my job is meaningless.   | 1 2 3 4 5 6   |
| 5  | Communications seem good within this organization.  | 1 2 3 4 5 6   |
| 6  | Those who do well on the job stand a fair chance of being promoted.   | 1 2 3 4 5 6   |
| 7  | I do not feel that the work I do is appreciated.  | 1 2 3 4 5 6   |
| 8  | My efforts to do a good job are seldom blocked by red tape.   | 1 2 3 4 5 6   |
| 9  | I find I have to work harder at my job because of the incompetence of people I work with.                       | 1 2 3 4 5 6   |
| 10   | I like doing the things I do at work.   | 1 2 3 4 5 6   |
| 11   | The goals of this organization are not clear to me.   | 1 2 3 4 5 6   |
| 12   | There are few rewards for those who work here.  | 1 2 3 4 5 6   |
| 13   | I have too much to do at work.  | 1 2 3 4 5 6   |
| 14   | I enjoy my coworkers.   | 1 2 3 4 5 6   |
| 15   | I often feel that I do not know what is going on with the organization.   | 1 2 3 4 5 6   |
| 16   | I feel a sense of pride in doing my job.  | 1 2 3 4 5 6   |
| 17   | There are benefits we do not have which we should have.   | 1 2 3 4 5 6   |
| 18   | I have too much paperwork.  | 1 2 3 4 5 6   |
| 19   | I don't feel my efforts are rewarded the way they should be.  | 1 2 3 4 5 6   |
| 20   | I am satisfied with my chances for promotion.   | 1 2 3 4 5 6   |
| 21   | There is too much bickering and fighting at work.   | 1 2 3 4 5 6   |

|    |   |   |   |   |   |   |   |
|----|---|---|---|---|---|---|---|
| 22 | My job is enjoyable.                      | 1 | 2 | 3 | 4 | 5 | 6 |
| 23 | Work assignments are not fully explained. | 1 | 2 | 3 | 4 | 5 | 6 |

## Appendix L: The Confidence Scale

| THE CONFIDENCE SCALE                                  |  |  |   |   |   |                 |
|---|--|--|---|---|---|-----------------|
| Copyright Susan E. Grundy, 1993. All rights reserved. |  |  |   |   |   |                 |
|   | <p>CIRCLE THE NUMBER THAT BEST DESCRIBES HOW YOU THINK OR FEEL REGARDING YOUR CURRENT ABILITY TO PERFORM YOUR JOB AS A MEDICAL EDUCATOR.</p>             | <p>Not at all certain</p> <p>Certain for only a few steps</p> <p>Fairly certain for a good number of steps</p> <p>Certain for almost all steps</p> <p>Absolutely certain for all steps</p> |   |   |   |                 |
| 1   | I am certain that my performance is correct.   | 1  | 2 | 3 | 4 | 5               |
|   | <p>CIRCLE THE NUMBER THAT BEST DESCRIBES HOW YOU THINK OR FEEL REGARDING YOUR CONFIDENCE PERFORMING THE MAJORITY OF YOUR TASKS AS A MEDICAL EDUCATOR</p> | Low confidence   |   |   |   | High confidence |
| 2   | I feel that I perform the task without hesitation  | 1  | 2 | 3 | 4 | 5               |
| 3   | My performance would convince the observer(s) that I'm competent   | 1  | 2 | 3 | 4 | 5               |
| 4   | I feel sure of myself as I perform the task  | 1  | 2 | 3 | 4 | 5               |
| 5   | I feel satisfied with my performance   | 1  | 2 | 3 | 4 | 5               |

Source Grundy<sup>88</sup>



## Appendix M : Monthly Reflective Journaling

## Coaching Reflective Journal | Session

1. Please indicate your identification character. (e.g. A, B, C)
2. After participating in today's peer coaching session, describe your experience. What thoughts, emotions, reactions, conversations were the most significant?
3. After participating in today's peer coaching session, describe any revelations discovered. What new knowledge, skill, understanding, or perception do you have?
4. After participating in today's peer coaching session, describe any aspects of your professional role which have been impacted. What, if any, impact on confidence, satisfaction, and/or collegiality have you noticed?
5. On a scale of 1 (not started) to 10 (complete goal attainment), where are you at in terms of achieving your **PERSONAL Professional END** goal?  
Enter the number below.  
In addition, please describe your answer.
6. After participating in today's peer coaching session, what actions do you need to take to move forward with your goal?
7. On a scale of 1 (not started) to 10 (complete goal attainment), where are you at in terms of achieving your **TEAM's Professional END** goal?

Enter the number below.

In addition, please describe your answer.

8. Please indicate your identification character. (e.g. A, B, C)
9. After participating in today's peer coaching session, describe your experience. What thoughts, emotions, reactions, conversations were the most significant?
10. After participating in today's peer coaching session, describe any revelations discovered. What new knowledge, skill, understanding, or perception do you have?
11. After participating in today's peer coaching session, describe any aspects of your professional role which have been impacted. What, if any, impact on confidence, satisfaction, and/or collegiality have you noticed?
12. On a scale of 1 (not started) to 10 (complete goal attainment), where are you at in terms of achieving your **PERSONAL Professional END** goal?  
Enter the number below.  
In addition, please describe your answer.
13. After participating in today's peer coaching session, what actions do you need to take to move forward with your goal?
14. On a scale of 1 (not started) to 10 (complete goal attainment), where are you at in terms of achieving your **TEAM's Professional END** goal?  
Enter the number below.  
In addition, please describe your answer.

## Appendix N: Post-Participation Interview

## Post Participation Interview Questions

---

Start the conversation with level setting the participants. We are recording the session. If you chose to not have your data be a part of this study, you can withdraw at any time.

We will start this interview by asking you about your experience serving as a 'peer' coach, then move to what your experience was like being coached by your peers (as a talent), and finally end with your experience with the coaching program as a whole. As we are eliciting your feedback, please be as forthcoming with your feedback.

We would like you to be aware that Carrie and I may have some non-verbal cues with each other. That is to ensure we are covering all of the information needed.

### **Can you tell me about your experience being a peer coach? E.g. what was it like to be a peer coach?**

Probes:

1. What was it like to provide coaching to your peers?
2. What emotions did you experience?
3. How have you grown in the last 6 months? What was it like at the beginning and now?
4. What was easy about providing coaching to your peers?
5. What, if anything, was difficult for you about providing coaching to your peers?
6. What knowledge or skills have you gained from this experience?
7. Did you engage in coaching others between monthly sessions and since the program ended?  
Please Describe.
8. Did you use what you learned in this class for the coaching? Please describe.

### **Moving into your experience of being coached by your peers, can you tell me about your experience being coached?**

Probes:

1. Would you rather have been coached by your peers or someone outside of your peer group?
2. What emotions did you experience?
3. In regards to the Peer Coaching program, what was it like to receive coaching from your peers?
4. What were the benefits of being coached by your peers?
5. What, if anything, was difficult about being coached by your peers?
6. What knowledge or skills have you gained from this experience?
7. Did you request to be coached by others in between monthly sessions and since this program ended? Please describe.

**Can you tell me about your experience being part of the peer coaching program?**

Probes:

1. What aspect(s) of the Peer Coaching curriculum, if any, were the most impactful to your personal professional development?
2. How has coaching affected, your collegiality? Please explain with examples when possible.
3. Can you tell us about the impact on confidence?
4. How has the Peer Coaching curriculum affected, if at all, your medical educator satisfaction? Please explain with examples when possible.
5. What changes, if any, do you notice in how you communicate with your colleagues since the program started?
6. What was the biggest success of this program?
7. What, if any, barriers did you encounter?
8. Did you use the modules?
9. Tell us about the sequencing of the sessions.
10. How will you use your experience as a coach in your professional role?
11. How will you use your experience receiving coaching in your professional role?

**What was the most critical point(s) in your journey? What was most impactful moment/event? Were there any/when did it happen?**

WRAP UP:

12. What would you say to others about being a peer coach?
13. Would you do it again?

## Appendix O: Peer Coaching Program Evaluation

10/14/2018

Peer Coaching Program Evaluation - Blackboard Learn

REQUIRED

Please indicate how much you agree with the following statement: the monthly journaling exercises were clear and easy to use.

REQUIRED

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

Please indicate how much you agree with the following statement: the monthly journaling exercise influenced my overall peer coaching experience?

REQUIRED

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

What recommendations, if any, do you have for improvement regarding the monthly journaling exercise?

REQUIRED

What additional materials, equipment, or resources you would have needed to better perform as a peer coach?

REQUIRED

[https://edonline.mayo.edu/webapps/enterpriseSurvey/executeSurvey?surveyid=5041&surveycmd=preview&nav\\_bridge=learn\\_surveys\\_manage...](https://edonline.mayo.edu/webapps/enterpriseSurvey/executeSurvey?surveyid=5041&surveycmd=preview&nav_bridge=learn_surveys_manage...) 45

10/14/2016 Peer Coaching Program Evaluation – Blackboard Learn

Character count: 0

What improvements, if any, would you recommend for future peer coaching program implementation?

▼

Character count: 0

REQUIRED

Submit

### References

1. Development MCOoOLa. The Power of Coaching: Leading with Influence. 2010? .
2. Steinert Y, Mann K, Centeno A, et al. A systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education: BEME Guide No. 8. *Medical Teacher*. 2006;28(6):497-526.
3. Jason H, Westberg J. *Teachers and teaching in US medical schools*. Appleton & Lange; 1982.
4. Irby DM. What clinical teachers in medicine need to know. *Academic Medicine*. 1994;69(5):333-342.
5. Lord JA, Mourtzanos E, McLaren K, Murray SB, Kimmel RJ, Cowley DS. A peer mentoring group for junior clinician educators: Four years' experience. *Academic Medicine*. 2012;87(3):378-383.
6. Heinrich KT, Oberleitner MG. How a faculty group's peer mentoring of each other's scholarship can enhance retention and recruitment. *Journal of Professional Nursing*. 2012;28(1):5-12.
7. Mayer AP, Blair JE, Ko MG, Patel SI, Files JA. Long-term follow-up of a facilitated peer mentoring program. *Medical Teacher*. 2014;36(3):260-266.
8. Angelique H, Kyle K, Taylor E. Mentors and Muses: New Strategies for Academic Success. *Innovative Higher Education*. 2002;26(3):195-209.
9. Goldman EF, Wesner M, Karnchanomai O, Haywood Y. Implementing the leadership development plans of faculty education fellows: A structured approach. *Academic Medicine*. 2012;87(9):1177-1184.
10. Gaff J. Toward faculty renewal: Advances in faculty, institutional, and organizational development. San Francisco: Jossey-Bass; 1975.
11. Bligh J. Faculty development. *Medical education*. 2005;39(2):120-121.
12. Bland CJ. *Successful faculty in academic medicine: essential skills and how to acquire them*. Springer Publishing Company; 1990.
13. Wilkerson L, Irby DM. Strategies for improving teaching practices: a comprehensive approach to faculty development. *Academic Medicine*. 1998;73(4):387-396.
14. Tessens L, White K, Web C. Senior Women in Higher Education Institutions: Perceived Development Needs and Support. *Journal of Higher Education Policy and Management*. 2011;33(6):653-665.
15. Whitmore J. *Coaching for performance: Growing human potential and purpose: the principles and practice of coaching and leadership*. Nicholas Brealey Publishing; 2010.

16. Orem SL, Binkert J, Clancy AL. *Appreciative coaching: A positive process for change*. John Wiley & Sons; 2011.
17. Veenman S, Denessen E. The coaching of teachers: Results of five training studies. *Educational research and evaluation*. 2001;7(4):385-417.
18. Zenger J, Stinnett K. *The extraordinary coach: How the best leaders help others grow*. McGraw Hill Professional; 2010.
19. Development MCOoOLa. The Power of Coaching: Leading with Influence. 2010?
20. Dweck C. *Mindset: The new psychology of success*. Random House; 2006.
21. Lencioni PM, Okabayashi K. *The Five Dysfunctions of a Team, Manga Edition: An Illustrated Leadership Fable*. John Wiley & Sons; 2008.
22. Patterson K, Grenny J, McMillan R, Switzler A. *Crucial conversations*. McGraw-Hill New York; 2012.
23. Rath T. *Strengths Finder 2.0*. Gallup Press; 2007.
24. Cooperrider D, Whitney DD, Stavros JM. *The appreciative inquiry handbook: For leaders of change*. Berrett-Koehler Publishers; 2008.
25. Jeffers SJ. *Feel the fear and do it anyway*. Random House; 2012.
26. Kimsey-House H, Kimsey-House K, Sandahl P, Whitworth L. *Co-active coaching: Changing business, transforming lives*. Nicholas Brealey Publishing; 2011.
27. Latham GP, Locke EA. Enhancing the benefits and overcoming the pitfalls of goal setting. *Organizational Dynamics*. 2006;35(4):332-340.
28. Rosenberg M, Chopra D. *Nonviolent Communication: A Language of Life: Life-Changing Tools for Healthy Relationships*. PuddleDancer Press; 2015.
29. Senge PM. *The fifth discipline: The art and practice of the learning organization*. Broadway Business; 2006.
30. Bowman CL, McCormick S. Comparison of peer coaching versus traditional supervision effects. *The Journal of Educational Research*. 2000;93(4):256-261.
31. Showers B, Joyce B. The evolution of peer coaching. *Educational leadership*. 1996;53:12-16.
32. Dutton JE, Ragins BRE. *Exploring positive relationships at work: Building a theoretical and research foundation*. Lawrence Erlbaum Associates Publishers; 2007.
33. Farrell Buzbee Little\* P. Peer coaching as a support to collaborative teaching. *Mentoring & Tutoring: Partnership in Learning*. 2005;13(1):83-94.
34. Lu H-L. Research on peer coaching in preservice teacher education—A review of literature. *Teaching and Teacher Education*. 2010;26(4):748-753.



35. Ladyshefsky RK. Building cooperation in peer coaching relationships: understanding the relationships between reward structure, learner preparedness, coaching skill and learner engagement. *Physiotherapy*. 2006;92(1):4-10.
36. Parker P, Hall DT, Kram KE. Peer coaching: A relational process for accelerating career learning. *Academy of Management Learning & Education*. 2008;7(4):487-503.
37. Parker P, Kram KE, Hall DT. Exploring Risk Factors in Peer Coaching A Multilevel Approach. *The Journal of Applied Behavioral Science*. 2013;49(3):361-387.
38. Parker P, Kram KE, Hall DTT. Peer coaching: An untapped resource for development. *Organizational Dynamics*. 2014;43(2):122-129.
39. Shollen SL, Bland CJ, Center BA, Finstad DA, Taylor AL. Relating mentor type and mentoring behaviors to academic medicine faculty satisfaction and productivity at one medical school. *Academic Medicine*. 2014;89(9):1267-1275.
40. Schwellnus H, Carnahan H. Peer-coaching with health care professionals: What is the current status of the literature and what are the key components necessary in peer-coaching? A scoping review. *Medical Teacher*. 2014;36(1):38-46.
41. Jacelon CS, Zucker DM, Staccarini J-M, Henneman EA. Peer mentoring for tenure-track faculty. *Journal of Professional Nursing*. 2003;19(6):335-338.
42. Korthagen FA, Wubbels T. Characteristics of Reflective Practitioners: Towards an Operationalization of the Concept of Reflection. 1991.
43. Gingiss PL. Peer coaching: Building collegial support for using innovative health programs. *Journal of school health*. 1993;63(2):79-85.
44. Sekerka LE, Chao J. Peer Coaching as a Technique to Foster Professional Development in Clinical Ambulatory Settings. *Journal of Continuing Education in the Health Professions*. 2003;23(1):30.
45. Moss J, Teshima J, Leszcz M. Peer group mentoring of junior faculty. *Academic Psychiatry*. 2008;32(3):230-235.
46. Varkey P, Jatoti A, Williams A, et al. The positive impact of a facilitated peer mentoring program on academic skills of women faculty. *BMC medical education*. 2012;12(1):14.
47. Ladyshefsky RK. Building competency in the novice allied health professional through peer coaching. *Journal of allied health*. 2010;39(2):77E-82E.
48. Cameron K, Dutton J. *Positive organizational scholarship: Foundations of a new discipline*. Berrett-Koehler Publishers; 2003.
49. Hunt JM, Weintraub JR. *The coaching organization: A strategy for developing leaders*. Sage Publications; 2006.

50. Waddell DL, Dunn N. Peer coaching: the next step in staff development. *The Journal of Continuing Education in Nursing*. 2005;36(2):84.
51. St Clair KL. Faculty-to-Faculty Mentoring in the Community College: An Instructional Component of Faculty Development. *Community College Review*. 1994;22(3):23-35.
52. Kinsella K. Peers coaching teaching: Colleagues supporting professional growth across the disciplines. 1995.
53. Killen R. Improving teaching through reflective partnerships. 1995.
54. Vidmar DJ. Reflective peer coaching: Crafting collaborative self-assessment in teaching. *Research Strategies*. 2005;20(3):135-148.
55. Rice G. Formative dialogues in teaching nonthreatening peer coaching. *Journal of Chiropractic Education*. 2012;26(1):62-67.
56. Huston T, Weaver CL. Peer Coaching: Professional Development for Experienced Faculty. *Innovative Higher Education*. 2008;33(1):5-20.
57. Katzenbach JR, Smith DK. *The wisdom of teams: Creating the high-performance organization*. Harvard Business Press; 1993.
58. Horn SE, Dallas F, Strahan D. *Peer Coaching in a Professional Development School: The Value of Learning Together as Teachers and Professors*. 2002.
59. Wininger SR, Birkholz PM. Sources of Instructional Feedback, Job Satisfaction, and Basic Psychological Needs. *Innovative Higher Education*. 2013;38(2):159-170.
60. Patrick SK, Fletcher JJ. Faculty developers as change agents: Transforming colleges and universities into learning organizations. 1998.
61. Brancato VC. Professional development in higher education. *New directions for adult and continuing education*. 2003;2003(98):59-66.
62. Johnson KS, Hastings SN, Purser JL, Whitson HE. The Junior Faculty Laboratory: an innovative model of peer mentoring. *Academic medicine: journal of the Association of American Medical Colleges*. 2011;86(12):1577.
63. Chitpin S. Can mentoring and reflection cause change in teaching practice? A professional development journey of a Canadian teacher educator. *Professional Development in Education*. 2011;37(2):225-240.
64. Maher J, Lindsay J, Peel V, Twomey C. Peer Mentoring as an Academic Resource: Or'My Friend Says'. 2006.
65. Driscoll LG, Parkes KA, Tilley-Lubbs GA, Brill JM, Pitts Bannister VR. Navigating the Lonely Sea: Peer Mentoring and Collaboration among Aspiring Women Scholars. *Mentoring & Tutoring: Partnership in Learning*. 2009;17(1):5-21.

66. Quinlan KM. Involving Peers in the Evaluation and Improvement of Teaching: A Menu of Strategies. *Innovative Higher Education*. 1996;20(4):299-307.
67. Santa Rita Jr ED, Donangelo FP. Peer Coaching in Classes Conducted via an Experiential, Group-Activity Format. 1996.
68. Wasburn MH. Mentoring Women Faculty: An Instrumental Case Study of Strategic Collaboration. *Mentoring & Tutoring: Partnership in Learning*. 2007;15(1):57-72.
69. Skinner ME, Welch FC. Peer Coaching for Better Teaching. *College Teaching*. 1996;44(4):153-156.
70. Mott MC. Cognitive coaching for nurse educators. *The Journal of nursing education*. 1992;31(4):188-190.
71. Flynn SP, Bedinghaus J, Snyder C, Hekelman F. Peer coaching in clinical teaching: A case report. *Family Medicine*. 1994;26(9):569-570.
72. Jewett P, MacPhee D. Adding Collaborative Peer Coaching to Our Teaching Identities. *Reading Teacher*. 2012;66(2):105-110.
73. Zwart RC, Wubbels T, Bergen TCM, Bolhuis S. Experienced teacher learning within the context of reciprocal peer coaching. *Teachers & Teaching*. 2007;13(2):165-187.
74. Bruffee KA. Collaborative learning and the 'conversation of mankind.' *Cross-talk in comp theory: A reader*. 1997:393-414.
75. Johnson DW, Johnson RT, Smith KA. Cooperative learning returns to college what evidence is there that it works? *Change: the magazine of higher learning*. 1998;30(4):26-35.
76. Topping KJ. Trends in peer learning. *Educational psychology*. 2005;25(6):631-645.
77. Witherspoon R, White RP. Executive coaching: A continuum of roles. *Consulting Psychology Journal: Practice and Research*. 1996;48(2):124.
78. Kirkpatrick DL. *Evaluating Training Programs: The Four Levels: Easyread Edition*. ReadHowYouWant. com; 2009.
79. Barry Issenberg S, Mcgaghie WC, Petrusa ER, Lee Gordon D, Scalese RJ. Features and uses of high-fidelity medical simulations that lead to effective learning: a BEME systematic review. *Medical Teacher*. 2005;27(1):10-28.
80. Freeth D, Hammick M, Koppel I, Reeves S, Barr H. A critical review of evaluations of interprofessional education. May 2002. 2004.
81. Steinert Y, Mann KV. Faculty development: principles and practices. *Journal of veterinary medical education*. 2006;33(3):317-324.
82. Van Manen M. Beyond assumptions: Shifting the limits of action research. *Theory into practice*. 1990;29(3):152-157.

83. Van Manen M. *Researching lived experience: Human science for an action sensitive pedagogy*. Suny Press; 1990.
84. Model ASL, Model AESL, Framework FLM. Enhancing program performance with logic models. 2002.
85. Beyer JE. Interpersonal communication as perceived by nurse educators in collegial interactions. *Nursing research*. 1981;30(2):111-117.
86. Taylor JC, Bowers DG. Survey of organizations: A machine-scored standardized questionnaire instrument. 1972.
87. Van Saane N, Sluiter J, Verbeek J, Frings-Dresen M. Reliability and validity of instruments measuring job satisfaction—a systematic review. *Occupational medicine*. 2003;53(3):191-200.
88. Grundy SE. The confidence scale: development and psychometric characteristics. *Nurse Educator*. 1993;18(1):6-9.